Some Pigs Can Fly

Aviation Anecdotes

by

Peter Rowlands


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for

Mom and Dad

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Foreword

Peter Rowland's compilation of anecdotal vignettes from his 40-year career in military and commercial aviation does not recount a path that was unique, but rather of a kind that has not been described often in writing, and never with more attention to the details that make every such journey unique in its own right. While his career was in aviation, the substance of this story is about far more than just airplanes, airports and airlines. His words reflect keen observations of those things, but also the times, the places, and the interactions between the people with whom he shared his life in aviation. Such interactions are not bound by time, geography or industry, but rather reveal universal truths regarding human nature.

Peter has said that he primarily intends this book to "rekindle warm aviation memories for pilots everywhere", and it certainly succeeds in that regard. Many of his contemporaries - a group among which I am counted - worked their way along similar paths from first flight to retirement, and they will be flooded with memories arising from the fog of events thought long-forgotten, even as they enjoy the way in which he leads them through his own recollections of those earlier times.

But I think it will be enjoyed every bit as much by those who considered a career in aviation, but went down a different path ... by those who enjoy history as viewed from the inside out ... and by those who simply enjoy stories well-told.

Peter is set apart by writing skills equal to those of his professional flying. This is not one man expounding the exploits of his youth, but rather an admission of how the foibles of youth were often survived - if not always overcome - as experience, maturity and understanding replaced mere exuberance. His ability to weave detailed recollections with often self-deprecating humour makes each chapter slide by all too quickly, whetting the reader's appetite for the episodes yet to come. It is a delightful read.

Mark H Goodrich

Preface

Although the practice of writing has often been part of my life, the idea of compiling written memoirs had always been but a wisp of morning fog evaporating in the heat of day—never gonna happen: my exploits were hardly extraordinary and many of my human failings are too ugly to share. Nevertheless, a 2013 reunion of former employees from our former airline's beloved BC District sub-region brought me face to face with old friends and old memories that inspired my writing of *The District ...* an attempt to capture the spirit of that time and place as seen through the eyes of one pilot. Of course, as readily seen by the encouraging responses to that article, the *true* story of the district can only be told through myriad accounts from thousands of people on the ground and in the air … maybe tomorrow. Meantime comes this compulsion to record as many "war stories" as possible before I forget too many more of them.

In hopes of creating something more than a monologue about flying airplanes, this retrospective on forty years of military and commercial aviation contains a selection of side-story anecdotes in hopes of increasing its entertainment value. While experienced aviators may discover previously unknown facts about an aircraft's production history or reconnect with long-forgotten details about its performance envelope, our young grandchildren might be amused to read about our ancient technologies and how they worked … or not. For memory-challenged historians, there are attempts to describe long-gone machines such as the Link Trainer and to depict seldom seen procedures such as inflight operation of a fifteen-man Argus crew. For geographers, there is a winter of charter flying around the Caribbean and a summer of high altitude photography over northwestern Canada. For the uninitiated, there is insight into commercial airline operations and close-up inspections of erstwhile modern jetliners along with in-your-face looks at several classic Canadian aerodromes.

The primary aim of this particular writing exercise is to re-ignite old fires and kindle warm aviation memories for pilots everywhere and anywhere. At the same time, there is hope that some members of the youngest generation will read beyond the technical jargon to appreciate a small slice of history while being motivated to pursue their dreams. Although there is no real moral to this story, its underlying theme can usually be found flying in formation with time-tested truisms.

Although sometimes you have to be good to be lucky, it's often better to be lucky than good.

PIG ONE

1

The Cub

Flying was not in my blood as it was in many colleagues who were born into families with pilot heritage. However, although none of my ancestors was known to have piloted an airplane, there was some aviation history in my immediate family: during WWII, my mother Teresa had served with the RAF and my father Edward had served with the RCAF. Being an independently minded young English woman, Teresa escaped factory work by back-dating her birth certificate to the required age for driving military vehicles around her native country; meanwhile over in Canada, Edward was watching his long-cherished aviation career fly out the window with eyes recently proven to be incapable of satisfactorily discerning colours in the visual spectrum. Dispatched to England as an Intelligence Officer with Bomber Command, he found Tess shuttling people and bombs for the squadron that soon became known as the *Dam Busters*. Ed and Tess married soon thereafter and they brought me to Canada at war's end.

Growing up in Stratford, Ontario, during the 1950s, despite numerous war stories that did inspire youthful fantasies of flight, playing hockey was usually considered more fun than building model airplanes. However, when my cousin Robert—himself the son of a former WWII-era RCAF Wireless Air Gunner living in Guelph—earned an Air Cadet scholarship and a private pilot's licence, he took me up in a Fleet *Canuck* … my first ever airplane ride … a couple of stalls and an incipient spin … what fun! When graduating from high school in Goderich several years later, good fortune offered me summer employment with Sky Harbour Air Services at the local aerodrome, a former British Commonwealth Air Training Plan facility then being operated by one of its former administrators Keith "Hoppy" Hopkinson. It was almost too good to be true: a well-maintained grass strip with an air charter business and a flight training school amid numerous aircraft of assorted types including home-builds and experimentals, all being supported by an experienced maintenance crew, a first-class radio shop, and a world-renowned paint shop. My entry-level reward for sweeping floors, pumping gas, and stripping paint was twenty (20) dollars *plus* one (1) free flying lesson per week. (Ancient memory suggests airplanes then rented for about $10/hour and a private pilot licence cost about $400.)

The work was fairly easy and the flying lessons were fun. The affable maestro of the paint shop, Don Fisher, was also the flight instructor who introduced me to the "Rules of the Air" in a J-3 *Piper Cub* known as CF-EFD. Along with Meteorology and other subjects of ground school came the hands-on training that in due course led to the ever-anticipated first solo and to one of those satori-like moments never to be forgotten: feeling the airflow over the wings while slipping softly onto familiar blades of grass in near silence … time standing still at 30 miles per hour … aah.

For reasons mostly academic, my application to enroll in the Canadian military's Regular Officers Training Plan (ROTP) did not make the cut of that summer's recruitment seminar at nearby Centralia air force base. However, a follow-up letter advised that "although they wished not to discourage further education, this applicant did fit their parameters for a direct-entry, five-year short-service commission as a pilot/navigator." For reasons far from academic, my response was a letter suggesting the deletion of their reference to navigator as a prerequisite to any further consideration. Lo and behold, back came a copy of their original type-written letter with the navigator option obliterated by an overlay of xxxxxxxxx. Having no other career aspirations and seeing no university courses of particular interest (or affordability), the decision was an immediately easy one. Although further formal education at Royal Military College had slipped out of reach, a direct-entry officer selection program was readily available. Done deal: the eighteen-year-old high-school grad would report for duty at RCAF Station Centralia in November of that year 1962 to commence training as a pilot/xxxxxxxxx.

Good fortune continued: for reasons most directly related to human kindness, the decision makers at Sky Harbour saw fit to accelerate completion of my private pilot's training program before expiration of extended summer employment. To compensate for diminishing daylight in late September, instructor Don decided to use a decidedly faster Piper *Colt* for the dual cross-country exercise from Goderich to Kitchener (Waterloo-Wellington) to Wiarton to Goderich. Although its tail wheel was on the wrong end, the Colt was manageable with assistance. Later that day, the solo cross-country flight was conducted in the opposite direction while flying the more familiar J-3 tail-dragger. Lake-effect afternoon snow showers were easily avoided on the northbound leg and Waterloo-Wellington was successfully located in afternoon haze at the "wide end of the funnel."

"Where goest thou now?" queried the refuelling agent.

"Back home to Goderich" replied the young soloist.

"You're not gonna make it," responded the hose-holder; "it's gonna be dark in half an hour."

"Oh!" stated the startled tourist. "But … but … be that as it may," he continued, "but, my instructor instructed me to fly this airplane home today."

"But … but … but," attempted the well-meaning hoser.

"Brakes set … Contact!" announced the pilot-in-command from the cockpit … whereby the well-mannered ramp attendant dutifully hand-cranked the small wooden propeller and then thumbed-up the *all clear* to taxi … a green light from tower quickly launched EFD into the sunset with a full, 9-gallon tank of gas, as evidenced by the high-riding dip-stick protruding through the filler cap immediately in front of the windshield. Pushed westward at 65 mph by a trusty 65-hp engine, the cockpit remained toasty warm with thanks to fleece-lined flying boots and a winter parka. Just like the guy said, it was soon dark … inside as well as outside. Having no generator, no battery, and no electrical system, the J-3 had no lights … outside or inside. Mind you, there was not much to see: sitting in the aft tandem seat, for weight and balance (C of G) purposes, the few instruments on the far-forward panel would be of little help even if visible: a compass is hardly necessary when following car headlights along Highway #8; a tachometer for engine rpm is redundant when the

little Continental is humming along on all four cylinders; and except when landing, the Cub's airspeed is always 65. With one hand on the throttle and one hand on the stick there was nothing to do but sit in the dark with both eyes peeled for any other low-level crazies flying around in the dark. Between the stars above and the lights below, little EFD purred nonchalantly through the universe. Somewhere between fear and excitement, I found a sense of bliss … any residual doubts about my career path were swept away by the prop wash and dispersed into the darkness behind … the future prospect of being paid money to engage in this "madness" seemed almost too good to be true. It was great to be alive and taking some risks. Thanks Mom ... *life does seem to be what happens when we're planning something else.*

Meantime, a change in surface contrast at the end of the road identified Lake Huron where the Maitland River's unmistakable dent in the shoreline confirmed the correct neighbourhood. The flashing white light from the hangar-top rotating beacon pin-pointed the airport where any questions about wind direction were immediately dispelled by the sight of several automobiles line-abreast at the eastern threshold of the main runway with their high-beam driving lights shining due west. No, CYGD did not have runway lights in those days, and instead it offered an excellent opportunity to try out that *precautionary landing technique* that Don had always considered so important … just in case, because maybe one day, or one night, it might prove necessary, glassy water or otherwise: use some engine power to maintain a slightly nose-high attitude at low airspeed and maintain a shallow rate of decent until you hit something ...

Some guys are just born lucky, and some of us get all the help we need … deserved or otherwise. In any case, it felt good to have a private pilot licence in my pocket when checking into the air force on 22Nov62. Thank you, friends, and thanks to Daddy Ed for this photograph as well as for his headlights.

Footnotes and Postscripts

1. **Robert Tessier,** my cousin who had introduced me to flying in a Fleet Canuck during the very early 1960s was subsequently diagnosed with a visual dysfunction that prevented him from pursuing an aviation career. Instead, he became a principle partner in Red Car Service and Airways Transit—two ground transportation companies that continue to shuttle air travellers to and from Toronto International Airport from the Burlington-Hamilton-Guelph-Cambridge-Kitchener-Waterloo area. Thanks for my first ride, Bob.

2. **Don Fisher,** my first flight instructor and the paint-shop maestro from Sky Harbour in Goderich, relocated to Tucson, Arizona, in the later 1960s. When visited in 2012, he had recently retired his octogenarian wings because of arthritis; however, he was still painting up a storm in his shop at TUS International Airport—his paint-scheme designs and his aircraft applications are still in demand. Fifty years after the fact, I was able to thank him for being such a fine instructor while re-apologizing for once leaving the cap off his 195's oil tank.

3. **Piper's J-3 Cub**, first flown in 1937, has always been recognized as an excellent trainer and a special treat to fly: almost 20,000 units were manufactured by 1947. With light-weight fabric covering a welded steel frame (22′ length x 35′wingspan), the 1,000-pound Cub is relatively inexpensive to operate and remains a popular choice world-wide. The higher-powered PA-18 Super Cub is most notable among a number of subsequent iterations.

Playing With Fire: A Chapter 1 Sidebar

It began as a typically warm summer's day at Goderich Airport where I was employed as a high school grad around time of my eighteenth birthday. This particular day at the airport—a grassy expanse on the bench above Lake Huron north of the Maitland River—was unusually quiet, especially for a sunny Sunday in summer, because most locally based pilots and planes were away at one of those fairly common *fly-ins* hosted elsewhere in the region for pancakes, coffee, and all the hangar-flying conversation anyone could handle. Here at Sky Harbour Air Services, the heavy panelled doors had been rolled wide open along their tracks and neatly filed to the side while the hangar was being emptied of airplanes. Our chief, Keith "Hoppy" Hopkinson, and his home-built *Stits Playboy* were the first to leave, followed closely by son John Hopkinson in his favourite *Cessna 195*. Departure of Bob Chisholm in his home-built *Baby Ace* suggested the possibility of an impromptu airshow somewhere later in the day. Our Radio Shop guru Bob Pattison and his *Piper Pacer* were also soon gone along with other licenced pilots flying the company's *Colts*. Also noticeably absent was "my" *J-3 Piper Cub* (EFD) that had recently introduced me to flying lessons. My flight instructor and the operation's Paint Shop maestro, Don Fisher, had also taken off to the popular fly-in. Suddenly, I was alone.

As junior newbie and low man on the proverbial totem pole, I was left to "guard the fort." Although it was not unusual to be somewhat alone on the premises, this was the first totally alone moment: the hangar doors were gaping wide open with barely an aircraft in sight; no-one needed a push or a pull before engine start; no transients were calling on the Unicom looking for landing information or taxiing up to the pumps looking for fuel. It was still too early in the day for curious tourists and there was nothing for me to do. While there is a definite limit to the amount of time one can spend looking at ground school instruction manuals, the amount of time available for wandering about interesting locales in idle curiosity seems infinite: a WWII-vintage aviation hangar and attendant repair shops filled with spare parts is an ideal venue for such idle pursuit. Having nothing to do has nothing to do with boredom, especially with a real-live and very talkative parrot holding court in the pilots' lounge. When my meager supply of intelligent response was soon exhausted, my feet led graceful retreat beyond the library into adjacent repair shops where a wide assortment of oily black and shiny silver aircraft parts identified works-in-progress atop wide, sturdy operating tables; after passing beneath several ancient flying machines of the early 1900s attached to hangar rafters, further exploration took me to the building's far southwest corner, near the paint shop, where my eyes fell upon a mechanical-looking device with a decidedly different flair—four wheels and no wings, an open cockpit with an engine in the back. It was a co-worker's souped-up Go-kart that he was known to race.

Forgive me, Lord, for I was young and foolish and knew not what I didst do. I would never steal anything. I just wanted to borrow the little motorized wagon for a brief inspection of the runway. I'm pretty sure my colleague would have given permission if he was there; in fact, we may have already discussed the possibility of possibly letting me drive it one day maybe. Having recently flown solo in a 65-horsepower airplane, I would be able to handle a lawn-mower motor strapped onto an aluminum toboggan with training wheels. Looking more aerodynamic than a Bumper or Dodgem car of previous experience, the Go-kart seemed of similar simplicity: one forward gear and one fast speed with wheel brakes thrown in for good measure. Pull the cord and off we go!

The soft silence of that summer day was shattered by the nasal scream of our small engine whining out from behind the hangar. So far so good: no-one else is around, and as noisy as we might be, we were not disturbing anyone else's Sunday meditation … out to the runway we go! It was fun while it lasted—a low-slung, powerful machine with surprising agility and stability. Then, for no apparent reason, the engine of my sleek steed suddenly quit running. No sweat: getting out from behind the steering wheel, I stood up and gave the starting cord a good pull. BLARE—the engine started on first yank. VROOM—the kart took off at full gallop without me. Obviously, the throttle was stuck open, and obviously, there was little I could do about it. After it screamed west for about a hundred yards without a rider, my erstwhile steed churned up grass and soil while executing a tight left turn to race directly back toward me. Holy Ghost! He's possessed and he's out to kill me! Look out! A half-hearted dive toward the motorized maniac on its way past was in vain: unless I luckily managed to grab the throttle, I would be dragged into oblivion. The mass and power of this runaway delinquent had suddenly become frighteningly obvious: in any attempted face-to-face showdown, I would be toast … and maybe crumbs. All I could do was stay out of its way while trying to remain in its general vicinity as it tore up turf in haphazard turns between short sprints across the infield. Maybe the miserable monster will run out of gas, or maybe the engine will quit running again for no apparent reason …

No such luck! For reasons unknown, perhaps subtle surface variation, that dastardly devil began moving its random acts farther south … toward the hangar. My heart rate went up another notch. Although not specifically about airplanes, this story does speak to the subject of flying: watching this unguided missile thrashing wildly toward several aircraft parked outside the hangar's north wall, this student pilot saw the possibility of his cherished pilot's licence and his chosen profession going up in smoke. Guided by powers unknown, this screaming Banshee dove into the space between two parked airplanes and cranked another short turn before arcing out *beneath* the low-slung fuselage of Boss Hoppy's beloved *Beech-18* charter machine … without contacting the main gear, the tail wheel or any other part of it. Hallelujah! Halle … look-out! That unpredictable duke of destruction was now heading straight east toward the gas pumps. My inclinations were unclear: I could throw myself down in its path and suffer severe injury in hopes of bouncing it off course, or I could simply embrace the highest-octane pump in hopes of an instantaneous shared demise. Either way, I was looking like toast. The first curious tourists of the day were now exiting their automobile in the parking lot immediately adjacent to the pumps.

SCREEE-THRASH-GNASH! With unknown guidance and total lack of grace, the unpredictable duke of doom hammered a last minute 270-degree spinning turn on the hangar apron's gravelly surface and headed south away from the pumps. The thunderous roar of its engine and exhaust echoing from gaping hangar walls defies description or attempted portrayal. Fortunately, the ever-dangerous little devil chose not to enter the building which still contained several floor-stored flying machines filled with fuel. Instead, my excitable little friend executed another quick sliding turn on the gravel, spinning 180 degrees before sliding backwards and slamming into the rear fender skirt of instructor Don's custom-painted 1951 customized Ford coupe … a moment of silence accompanied settling of the dust around the immobilized Go-kart before the sound of an automobile in motion announced the departure of two no-longer-curious tourists. Once again it was an unusually quiet summer day at Goderich Airport where, other than a broken spark plug and a dented car part, there was nothing to report. Hangar doors would be closed later that evening and confessions would eventually follow … *if you can't be good, it helps to be lucky.*

2

Chippie and the Beast

With help from my friends and the J-3 Piper Cub, a Private Pilot Licence accompanied my entry into the Royal Canadian Air Force in November of 1962, where *Course 6208,* the eighth such intake of that year, proved to be an eclectic mixture of very young men from across the country being brought together for assessment and possible selection as aircrew officers. Subsequent weeks of mental and physical examination led successful candidates into the officially structured officers' training school which offered fairly formal instruction on subjects as diverse as table manners and foreign affairs to public speaking and aerodynamic principles; of course, the introduced marching drills and physical education programs would be with us for the duration. After many such weeks of generic social conditioning, the officer cadets of 6208 were then segregated into their assigned specialties: navigator trainees were dispatched to Air Navigation School in Winnipeg while pilot trainees remained in Centralia to attend Primary Flying School.

Several more weeks of bookwork in ground school finally got us pilots to the flight line where we were introduced to De Havilland Canada's first post-war production model, the DHC-1 *Chipmunk,* a low-wing monoplane then serving as a primary flight trainer for military forces around the world. Manufactured at home and abroad, more than 1,200 had entered service by 1957. Dressed in Training Command yellow and topped with a bubble canopy, our Canadian "Chippie" was a friendly-looking machine that usually evoked smiles inside and out. With the same engine and half as many wings as its *Tiger Moth* predecessor, it proved to be a wonderful little flying machine: highly responsive while pushing 100 on the speedometer with its 145-hp *Gipsy Major* inverted four-cylinder engine, it was certainly a step up from the J-3 Cub. Although approximately the same dimensions (L25′ x W34′), the mostly metal Chipmunk operated at 2,000 pounds, about twice the weight of the Cub.

Stronger than it looks, the Chipmunk had just enough idiosyncrasies to make it a wonderful training machine: not only was the engine upside down with a backwards turning propeller, but also, the hand-operated wheel brakes needed to be partially applied at just the right amount to provide directional control on the ground. Along with endless circuits and bumps came the introductory thrill of aerobatics; along with strict compliance to airborne procedures came traditional rites that signal completion of a successful first solo flight—a garden-hose shower on the flight line and a uniform tie cutting ceremony back at the mess hall. The school's entire flying curriculum was completed in 33 calendar days with 23:40 in the air that included 7:30 of solo time. Thank you, Flying Officer MacDonald.

Introduction to heavier aircraft came a few days later when an RCAF C54-GM *North Star* picked us up and headed west … we soon understood why this Merlin-powered DC-4 derivative was unaffectionately known as the *Noisy Star*. After depositing one half of our class at RCAF Moose Jaw in southern Saskatchewan, the four-engine transport took our half to RCAF Station Penhold at CYQF Red Deer in south-central Alberta where we commenced "real" flight training at a "real" flying training school, #4FTS.

As thousands of airmen before us could easily attest, our next-assigned training aircraft was really real: some would call it a beast. Originating in the USA as the T6 *Texan* during the 1930s, this strong low-wing monoplane with a high-torqueing radial engine became widely accepted as an ideal transition into the most powerful piston-engine fighters of the day. Often built abroad under licence and sometimes modified for specific roles, including armed ground support, 15,495 iterations of the North American Texan saw service in more than 50 countries. Manufactured by Canadian Car and Foundry during the 1950s, the Mk2 and the ultimate Mk4 version entered service with the RCAF as the *Harvard.*

Bringing its inherent qualities—a bit intimidating and somewhat unforgiving—into the RCAF's Training Command colour scheme soon earned it the "Yellow Peril" moniker out of respect. Measuring 11-feet high, 42-feet wide, and 29-feet long, it was a significant step up from Chippie. With its 600-hp Pratt & Whitney R-1340 *Wasp* 9-cylinder radial engine out front and a small tail wheel out back, the 5,000-lb trainer could be a brute to handle on the ground and an operational challenge during take-off and landing. Yes, dented wingtips and bruised egos were occasional visitors to the flight line, and unrequested career changes were not unheard of.

"You'll never know how to land it," stated the instructor; "you just need to know how to recover."

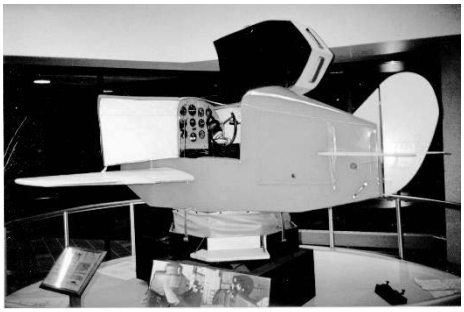
For those of us blessed with abundant good fortune, the *Harvard* provided an exhilarating learning experience that often included an aura of Avgas in the cockpit and fresh spatterings of oil on the windshield … pushing throttle and punching rudder to the tune of a snarling monster … a lifetime joy never forgotten. Power-off three-point landings onto painted runway circles and endless touch-and-goes soon brought us up to speed. Eventually, we got to do it at night … with lights no less! In designated day-time flying areas away from the airport traffic pattern, we were introduced to airspeeds beyond 200 knots (230 mph) while experimenting with aerobatics and other unusual attitudes … some learning experiences were too real to be imagined. While not known as a high-performance aircraft, the Yellow Peril can do amazing things while pushing the definitions of extreme. Strapped tightly into our pseudo-security parachutes, we tyros sometimes ventured close to the edge, and sometimes the beast took us places we didn't know existed. What a ride! Somewhere between bliss and excitement, fear could be found.

After many weeks of aircraft familiarization, we were introduced to the art of formation flying. Wow! Seven dedicated missions taught the basics of multi-plane choreography and brought increasing respect for our solid and responsive bird. In very short order we came to appreciate the shared beauty of being glued to another wing tip and following our leader over the top.

"Okay lads," welcomed the instructor, "now it's time to go somewhere." Thus began navigational experiments that included hours of ground-school training in arithmetic as well as ten dedicated cross-country missions of about two hours each. Ah yes, those were the map and compass days, long before we knew anything about autopilots or inertial navigation systems. Often bouncing around in summer Cumulus, we followed lines on a map and numbers on a flight plan while using a hand-held E6B circular slide-rule to figure everything out. On track or otherwise, often aided by wander-prone, vacuum-driven directional gyros, we caught our first glimpses of the Rocky Mountains and of the Red Deer River Badlands. On night flights, we had smoother air and better reception for our ADF (Automatic Direction Finder), a then-modern "high-tech" navigational aid that, when appropriately tuned, provided musical entertainment while also pointing the way home.

Becoming reasonably adept at finding our way around in VFR conditions (Visual Flight Rules), we were simultaneously ushered into the dark world of IFR (Instrument Flight Rules), learning how to fly an airplane around without looking out the windows. However, on the route between ground-school theory and airborne instruction lay an ornery little training device known as the *Link Trainer.*

If school was purgatory and the airplane was Yellow Peril, the intermediary Link between them was Blue Profanity—a loose collection of springs and levers in an enclosed box rotating on a central axis from which simulated flight profile information was somehow transmitted to a tiny tin crab leaving trails of ink across an instructor's surface plot. Inside the box, student pilots monitored a few basic flight instruments while frantically stirring the stick and pushing spring-loaded rudder pedals connected to organ-grinder control bellows while listening to incessant Morse code signals from a fictitious radio-range station … dit-dah-daaah-dah-dit.



Perspiration and muttered profanities were usually part of the package; as such, acquired patience and persistence were beneficial side effects from training in the sweat-box. Out in the light of day, it was generally accepted that if you could outlast the Link, you could probably handle the airplane.

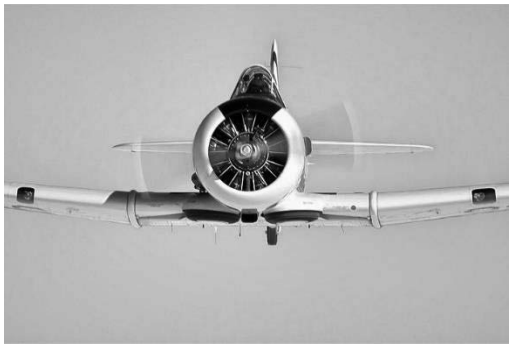
Under the aptly named *blind flying hood*, our airborne instrument training sessions were conducted from the Harvard's rear seat while an instructor monitored the big picture from up front. Fortunately, the airplane proved significantly more manageable than the springy-Link-thing … providing we remembered to use proper aileron for turns instead of cheating with rudder pedals. For reasonably consistent heading reference in the airplane, it was also necessary to remember to regularly reset the wander-prone vacuum-driven Directional Gyro, the DG, in accordance with the wildly inconsistent Magnetic Compass … a compromise at the best of times. *Attitude,* of course, was everything for pilots as well as for their planes, and many hours were devoted to the study of such. Recovering from instructor-induced highly unusual attitudes was part of the drill, as was flying *needle and ball*—using the old Turn and Bank Indicator as a primary flight instrument—while the gold-standard Artificial Horizon was caged and out of service. Once reasonably capable of keeping our craft right side up, we were introduced to basic instrument approach procedures using nearby NDBs (Non-Directional Beacons) and Radio-Range Stations as well as GCA (Ground Controlled) radar approaches at RCAF Namao (CYED) with brief looks at Edmonton's Municipal (CYXD) and its International Airport (CYEG); notwithstanding any technical definitions, we soon developed wide appreciation [literally] for the term *non-precision* approach. Also, (only when so compelled) we learned the ancient art of *lost-range orientation*—a procedure used to aurally establish position relative to four radio-range legs when our ADF pointer-needle stops functioning for whatever reason. Often discretely referred to as the *last-chance orientation,* this painstaking trial-and-error exercise was seen by many of us to be just a way of keeping ourselves busy until we ran out of gas …

Along with 19:00 hours in the Link trainer came 32 designated IFT (Instrument Flight Training) missions in the airplane that put 39:20 of "cloud time" in the log book, first steps toward eventual IFR qualification. Cross-country navigation flights contributed another 20:00 hours while formation flying accounted for another 10:00. This six-month course at Penhold, provided my log book with 170:55 hours on the Harvard, including 63:25 solo. Unbeknownst at the time, the gnarly old Yellow Peril would always be one of my favourite three aircraft ever flown.

In lifetime retrospective, that six-month sojourn in south-central Alberta was something special: not only did we learn to more-or-less fly a real airplane, but we also learned something about some other things, aviation related and otherwise. Along with first-class instruction from mighty fine people, came introduction to the realities of a military existence tempered by a small-town feel; along with the smell of the clover and the thrill of the ride came a sense of camaraderie that ever so slightly hinted at where we were going. Special thanks to F/L O'Mara and F/O Leblanc.

Of course, when not on duty or confined to base for previous infractions, the young cadets of 6208 flew their newly acquired automobiles on exploration missions far and wide, accumulating experience and collecting stories … many of which are best forgotten. However, two stories from the QF flight line have not been forgotten.

One certifiably true account centers on the aircraft maintenance log—one for each aircraft—that records all issues relating to safety and serviceability as reported by pilots, and all corrective actions taken by the ground engineering staff. One day, a pilot reported a particular aircraft to be flying *left wing low*. As per procedure for aircraft without cockpit-controlled aileron trim, the maintenance personnel reported that the exterior trim tab affixed to the aileron had been adjusted (i.e. physically bent) an appropriate amount in the appropriate direction. Next day, another written entry by a different pilot reported this same aircraft to be flying *right wing low*. Dutiful as always, the ramp crew's written entry reported that the same exterior trim tab had been readjusted a slight amount in the new appropriate direction. Sure enough, on the third day, a third pilot reported the same aircraft to be flying *both wings low*.



An unverified story from a previous summer centers on a farmer's field where a student pilot had accomplished an emergency forced landing because of engine failure some distance from home base. Subsequently, the well-experienced supervisory instructor who was dispatched to rescue the student also found himself in need of rescue: despite employing his very best short-field landing technique, the instructor's Harvard ran out of room at a fence line and chewed up some barbed wire with its propeller. "How in hell did you get into this field?" asked the instructor.

"Easy," replied the student with a jerk of his thumb, "I bounced in from that one over there."

Footnotes and Postscripts

1. In 1929, **Edwin Link,** a former organ and nickelodeon builder from Binghamton NY, used his knowledge of pumps, valves, and bellows to construct a personal "flight simulator" in order to reduce the cost of earning a pilot's licence. Originally conceived as a heads-up visual trainer, Ed's *Link* soon acquired a blind-flying hood and the instruments to go with it. By end of WWII, more than 7,000 Link Trainers had been delivered to the U.S. military where an estimated 500,000 pilots have trained with it. A secondary factory in Gananoque ON produced 5,000 units distributed among 35 countries. Progress being what it is, some of today's airline pilots might be retiring without ever having whirred around in the little blue bird with the yellow tail. Amen.

The Merc: A Chapter 2 Sidebar

She was a 1948 model, one of those *Coupe-Sedan* oxymorons that came with a full-size back seat but only two passenger doors. Out front, she sported an impressive array of curved chrome that streamlined into speed-stripes sweeping over large front fenders to a stylish rear end that complimented her moderately sized body. Painted medium green, not quite British racing green, but green nevertheless, she was a rare gem. Under the hood, she had an iconic *flathead V-8* displacing 239 cubic inches and putting out 100 horsepower; in the cockpit, she had a three-speed shifter on the control column and 100-mph speedometer on the panel.

In the back seat, Terry, Doug, and John were harmonizing to Elvis Presley tunes accompanied by the road-induced rhythms of ice cubes in old-fashion glasses. As smallest member of the party, I was the middle person on the front seat, between Trevor-the-tall and Bob-the-owner-operator. Uniformly clad in our lightweight gabardine windbreakers with the *Course 6208* crest, we were once again off to see the world through government-issued sunglasses after yet another week of confinement to our RCAF pilot-training base in Penhold, Alberta—marching everywhere and always following orders while playing with fear in *Yellow Peril* airplanes. Our barrack-block existence was warmly augmented by the Officer-Cadets Mess, a communal facility where we could find food and drink while "relaxing" around Ping-Pong tables and billiard tables when not telling "war stories" around the tended bar that dispensed 25-cent beers and 35-cent shots. A course favourite libation was the Zombie—a green-coloured combination of both—that expeditiously determined the staying power and sanity of all who imbibed. Even on our meagre training pay, we could over indulge for special occasions, and any day we didn't get kicked out was special.

Bob's green Merc was special: prior to mid-term leave when most of us would then acquire our first automobiles, his family's hand-me-down was the primary off-base transportation for his multitude of friends. From the bright lights of Edmonton to the Calgary Stampede and the wonders of Banff, we wandered far and wide in a remarkably few weeks. Although we had been to Sylvan Lake, the Grand Bend of Alberta, several times previously, this trip was something special again—it was mid-July 1963 and the *cause célèbre* was my 19th birthday.

Motoring north along #2, even then a four-lane divided highway, Bob related how this 1948 Mercury, his family's pre-owned automobile, was identical to one his granddad had purchased brand new away back when … Perhaps distracted by my questions and/or the Elvis back-up singers behind him, Bob-the-pilot-in-command suddenly turned right onto an off-ramp exit that looked identical to the one we wanted at #11 leading to Sylvan Lake. After maintaining excellent control while banking steeply around the uphill curve, our skipper was then perplexed by the sight of an unpaved gravel road heading due west, and recognizing the track error, he took immediate corrective action. Unfortunately, the rural extension of Red Deer's 32nd Street was considerably more narrow than the Merc's turning radius and our attempted 180-degree U-turn was only good for 90 degrees before a steep incline slipped us off the road embankment and down to a farmer's fence. Although it was a 20-foot drop, there was no ugly ditch at the bottom, and there was no apparent damage to our automobile or to the farmer's fence ... *down at the end of Lonely Street* ...

… a moment of silence segued into hilarious laughter.

After several failed attempts to get the Merc back on the road by accelerating along the fence line and by group-effort pushing up the hill, we decided it was time to request assistance … whereupon we clambered up the embankment to flag down an approaching automobile. Perhaps distracted by the number of foreign-language beggars in soiled clothing, that middle-aged farm couple was oblivious to our needs: they rolled up their windows and continued on toward town. Immediately thereafter, a hastily convened conference produced a consensus opinion whereby is was decided that one, and only one, participant should seek roadside assistance at any one time; furthermore, the lucky candidate should be capable of speaking the language while being small enough to appear non-threatening. That would be me. Often the shortest person in my class, I am occasionally also the soberest: for reasons never understood, I hadn't gone "all-in" to that evening's party mode.

Thumbing a ride to Red Deer with the very next eastbound shopper, I logged considerable mileage on my feet before finding a gas station with a tow truck; however, only by painful plaint did the man in charge agree to leave his young assistant to look after things while he and his tow truck attended to my dire needs. Our friendly conversation came to an abrupt end at destination. My friends and the Merc were gone! Quietly back to town we went, where I handed over all the money in my jeans—a pitifully small and insufficient amount—while giving thanks for the Zombies I hadn't consumed. As expected, my telephone call to the barrack block pay phone went unanswered. What to do? While aimlessly exploring a strange city with my empty pockets, two older women took pity on me and invited me home to their basement suite. Being female and beyond the age of 20, they had minimal interest in little boys and their toy airplanes [boy toys notwithstanding]; however, they did engage me in light conversation while offering me unrestricted use of their telephone. It was difficult to know whether they were bored with my presence or disappointed by my desire to go elsewhere. In any case, sometime around midnight, Doug answered the barrack block pay phone and handed me over to the Merc's owner-operator. "Rowlands!" demanded Bob, "What did you do with my car?"

While it's difficult to imagine a more humorous ending to my birthday celebration, there is more to the story. With nothing else to do while waiting for a tow truck, Bob had got the old Merc going faster and faster along the fence line until it was finally able to launch uphill onto the road-grade, whereupon he and his crew immediately regained the flight-planned track toward Sylvan Lake. Apparently distracted by excitement of the moment, my former compadres failed to remember a missing member of their party … even if they had remembered me, they wouldn't have known where to look. Instead it was upwards and onwards for another night's ride in the wilds of south-central Alberta where, after many hours and many more miles, their erstwhile trusty steed gave out beneath them … a seized engine brought the old green gem to a sudden halt … sadly, human oversight and an indication failure may have compounded damage incurred during its off-road adventure. In any case, my fellow birthday party celebrants were similarly obliged to seek alternate travel arrangements home, by which time none of them had any remembrance of "ditching me." Next day, Bob had his dead Mercury towed back to base where it was subsequently sold to an incoming cadet for significantly fewer dollars than the price of one tow-truck service in today's dollars. An event none of us can be proud of, that last flight of the '48 Merc was certainly a night to remember … for at least one of us.

3

The T-Bird

If the summer of ’63 had rolled (and bounced) along in a collage of colourful texture, the winter of ’64 flashed by in a streak of silver and white. After six months of training on the Harvard in south-central Alberta, our half of Course 6208 was transferred to RCAF Station Portage La Prairie in southern Manitoba and began training at #2 AFS (Advanced Flying School) where we were introduced to the CT-133 *Silver Star,* more familiarly known as the *T-Bird*. Suddenly the weather was cold, the airplane was fast, and the training was intense. The ensuing six-month training program on the T-Bird would be a *rush* for all of us and a bit of a *blur* for many of us; the unfortunate few who failed to remain up to speed were soon dispatched back to Civvy Street.

For us Brown Flight newcomers, indoctrination began with a heavy dose of ground school which included new subjects such as turbojet engines and high-speed flight dynamics along with ejection seat familiarization and decompression chamber experiences. When not engaged in marching drills, mandatory physical education exercises, or practicing with the base hockey team, numerous hours were spent blindfolded in a cockpit … feeling one’s way around … learning a new machine from the inside out.

First flown way back in 1944, the Lockheed F-80 (former P-80) was the first operational jet fighter for the United States Air Force, and was sent into aerial combat during the Korean War of the early 1950s. When this straight-wing design proved inferior when up against swept-wing Migs, it was soon withdrawn from service and successfully replaced by the transonic swept-wing F-86 *Sabre*. Back home, with addition of a second pilot seat, the erstwhile F-80 fighter jet became a first-generation turbojet trainer known as the T-33 *Shooting Star*. Its 11-foot height and 42-foot wingspan were identical to the Harvard with a slightly longer 38-foot fuselage; to a maximum of 16,800 pounds, its normal operating weights were more than double. The fact that 6,557 of these machines were built for operation in 20 countries is testament to its virtue.

In 1951, Canada was early off the mark, contracting Canadair of Montreal to manufacture a modified Canuck version that was about 30% more powerful than its American cousin through replacement of the original Allison engine with a Rolls-Royce Nene 10 and its 5,000 pounds of static thrust. Representing about 10% of worldwide production, the 656 Canadian-made T-Birds were soon recognized to be in a class of their own. Honouring the *Silver Dart* of 1909 and the first heavier-than-air flight in the British Empire, Canada’s first-ever jet trainer was christened the *Silver Star*.

It was love at first sight: streamlined and compact with subtle curves; two well-shaped jugs of fuel on the wingtips and one smooth, clear canopy on top, the Silver Star looks like a bird who wants to fly … and she does.

A new man-machine relationship began on the 9th day of January 1964 with an aircraft familiarization exercise that provided my very first opportunity to fly a jet-powered airplane. Some differences were immediately obvious: The T-Bird's directly rigged flight controls demanded sensitivity along with a revised approach to aircraft handling; also, contrary to previous experience, it proved beneficial to keep one's feet on the floor and off the rudder pedals as much as possible to avoid messing up a good thing; within the tight cockpit, all switches, dials, gauges, and actuators are smaller and closer together, often requiring more discerned focus. As well as fuel and hydraulic systems of increased complexity, there were new systems such as Oxygen that bring additional items to an already busy cross-check while looking, breathing, and talking through an oxygen mask brought sensory awareness directly into one's face. Meanwhile, an electric trim switch on the joy-stick and a radio-transmit button on the throttle ensured ambidexterity; the gear, flap, and speed-brake controls are near the left-handed throttle where they're supposed to be and most of the electrified switches are over there on the right.

Heads up! This sleek-silver bird's speed and agility doesn't allow much eye-time in the cockpit … unless of course you are "under the bag" flying on instruments from the back seat.

The same day that offered my first 1:30 hours in the jet-powered airplane also provided my first 4:00 in one of the flight school's Link Trainers. Yes, the familiar rotating blue boxes continued to be our primary vehicle for learning instrument flight procedures. While a stationary T-Bird cockpit mock-up provided the most appropriate place for learning checklists and procedures, the springy old Link was where we continued learning how to navigate blindly around the countryside … pushing pedals and sweating bullets. Once airborne in the T-Bird's back seat, we learned to integrate all the instrument procedures while continually trying to keep the airplane "blue side up." It was a challenge at times, but always happening: airborne instrument flying and ground-based Link training began early and continued hand-in-hand throughout our entire training syllabus while being integrated with other flight regimes.

The most fun, of course, was good-old day-time VFR … seeing what the airplane could do by looking out the window. Once we learned how to ride its speed and agility, the T-Bird introduced us to another world of aerobatic manoeuvres that could literally take one's breath away in a wide spectrum of g-forces and awesome attitudes. From maximum-power climbing vertical rolls to very high-altitude loops of faith, airspeeds ranged between 80 and 480 knots (100-550 mph); off-the-top rolling manoeuvres and Cuban Eights to infinity were soon part of every cadet's mandatory aerobatic sequence. We had been given the gift of flight! If repetitive practice ever brought boredom, a sudden high-speed stall or a fast-tight spin would soon breathe excitement back into one's oxygen mask.

On the way home, we sometimes practiced an engine-failed forced landing procedure using proven High-key and Low-key reference points for successful transition to the "dead-stick" landing zone on familiar runways. Nonetheless, in a real-life engine-failure situation at any distance from a paved landing surface, bailing-out (literally) was always considered the primary option.

Returning to base with a normally functioning engine, it was always a rush to join the traffic circuit with a high-speed run-in for a flat break overhead the landing threshold—quickly roll on 60º of bank and pop the speed brakes for a tight 180º turn downwind … abeam the button, drop the gear and begin another tight 180, descending toward the threshold and lowering wing flaps on schedule with decreasing airspeed … touchdown! When practicing touch-and-go landings, we utilized another near-aerobatic manoeuvre that was fun to fly as well as being a practical method for saving time and fuel. The *closed pattern* taught us to suck-up the gear immediately after lift-off and to accelerate briefly forward before racking-on a ton of bank and pulling-hard toward the downwind leg, rolling-out at circuit height within a tip tank of the runway … take a breath; abeam the downwind threshold, pop the speed brakes, throw out the gear and lower full flaps while cranking a hard turn toward the button … adjust engine thrust as required; after greasing another one on, bring in the boards and advance the throttle while retracting the flaps to less than half … accelerate until lift-off … repeat as necessary every three minutes.

With arrival of Course 6301 and subsequent, we 6208 brown-flighters became intermediary green-flighters before evolving into ultimate gold-flighters—the senior-most course of pilot trainees at one of our air force's most advanced flying schools (the other half of our course was attending #3 AFS at RCAF Station Gimli, also in Manitoba). As might be expected, our rise in cadet seniority brought increased responsibilities along with a semblance of power. For some of us, this transition was particularly acute. Having previously been designated cadet representative for Course 6208, 19-year-old #95987 Officer Cadet P. E. Rowlands suddenly found himself Cadet Officer Commanding (COC) of #2 AFS at RCAF Station Portage La Prairie. It wasn't pretty. Moderately adept pilots don't necessarily make good administrators, and early advancement seldom brings experience; furthermore, extra-curricular distractions by nefarious troublemakers tend to overload light-weight pseudo-leaders trying to catch up to their mission … I never quite made it.

My very first IRQ (Instrument Rating Qualification) check ride was a failure. Although approach procedures on a short route through Winnipeg and Gimli were safely conducted without violating minimum descent altitudes, the examining officer considered overall aircraft handling skills to be beyond acceptable limits for an instrument-qualified airman. No, it wasn't a particularly good day, and only today's distant retrospect can turn yesterday's lame excuses into rational understanding. Along with customary pre-game nervousness, that day's disappointing IFR performance may have been affected by that day's high-energy formation flight immediately preceding it: without having "come down" in conscious transition, aggressive control habits can make for pretty twitchy conditions when trying to read let-down charts in a darkened cockpit. Lesson learned: remember to focus on only one flight at a time … and similarly, be certain that whatever happens on the ground is left on the ground. In its own peculiar manner, that failure served me well for the next forty years. Meanwhile, a successful IRQ re-ride provided official entry into the real world of instrument flying with a log book showing 90:00 hours of simulated cloud time in airplanes and 45:00 hours in the stink-box Link.

As graduation day approached, the acquisition of our proper one-striped Flying Officer uniforms accompanied parade rehearsals and administrative preparations. Soon after being interviewed by a board of senior officers, we received official notification of our next postings: while two course mates, Bob Garry and Larry Mealing, were headed for higher-speed fighter jet training, most of us would be shuffling off to multi-engine propeller school with big dreams and bigger airplanes in mind. Especially for us readers of Ernest K. Gann, delivering mail and carrying people seemed like noble chores with ample opportunities for excitement. Furthermore, for the very few of us who had experienced air rushing back and forth through burst eardrums during extreme altitude variations, the thought of a more moderate flight envelope had merit. Experiential research on the subject membrane had proven my paper-thin eardrums to rupture more easily—though less violently—than more normal, thicker rubbery ones. Although my kind of drums might heal more quickly with proper medication, the possibility of damage to the inner ear's balance mechanism was of ever-increasing concern to the people who know about such things; therefore, after two such incidents, the medical officers in charge advised that any further such incident would ground me from the flight line while being exposed to comprehensive treatment and testing. Understandably, there came no further reports of blown ear drums from this student pilot.

May 1st 1964 marked our graduation from flying school with a ceremonial Wings Parade leading to formal presentation of the coveted emblems for our new uniforms followed by dinner for families and friends at the Officers' Mess. Among ceremonial rites, the trophy for best student pilot went to classmate Bob Garry while the plaque for highest marks in the class went to myself. Despite its occasional moments of fear and disappointment, T-Bird school was over far too soon: after many weeks of barely keeping up to speed with its demanding syllabus, some of us were just beginning to feel comfortable with its high-performance flying machine; in fact, the more I flew it, the more I liked it. In the end, my log book showed a course total of 136:35 on that ever-dynamic CT-133 *Silver Star* that would be remembered as my second-most favourite airplane ever flown.

Unbeknownst when this photograph was taken, several of these good friends and course mates would fail to graduate in the following week.

Also unknown at the time, several others would perish in the line of duty within a few years of receiving their wings.

Impossible to predict at the time, good fortune would bring me a happy reunion the T-Bird many years later.

Scare Shows: A Chapter 3 Sidebar

While undergoing pilot training at RCAF Station Portage la Prairie during the winter of 1963-64, we flight cadets (aka officer cadets) of Course 6208 became increasingly familiar with the CT-133 *Silver Star* jet trainer: snapping a frozen oxygen mask against your face was small price to pay for the joy of doing aerobatics and flying closed patterns in the energetic T-Bird. Of course, along with the joy and excitement came those awkward moments when inexperience and human error give real meaning to the training process. Sober reflection brings to light a particular night of learning closed patterns in the darkness with my instructor who seemed similarly confused by a sudden increase in the stress level of our tower controller's voice amidst discernable agitation from other birds, especially those joining the circuit with high-speed flat breaks over the button. In the course of several high-anxiety touch and goes it became obvious that we weren't obvious: it seems my club-fingered-gloviness had inadvertently selected our navigation lights to OFF while attempting some adjacent switch selection on the busy starboard console. Flying stealth is a piece of cake … as long as everyone else has their lights on.

Another memorable event, with more illuminating ramifications, occurred while doing closed patterns during daylight hours. "Speed's too high, you're going too fast!" exclaimed my instructor over live intercom from the rear seat as I dutifully deployed our undercarriage when passing abeam the threshold of the landing runway on our routinely close-in downwind leg. Mildly rattled by this piece of news, I was totally shocked about 30 seconds later when he took control of the airplane and castigated me for attempting a wheels-up approach. Oh-oh! Given the intensity of the moment, I may very well have reselected the undercarriage up and then forgot to put it back down; however, that's unlikely given my usual reaction to administrative oversight (a shrug and an oops before carrying on); more probably, my earnest instructor had immediately selected the gear back up to make his point and I was busy with other things before getting the "three wheels" back into my crosscheck. In any case, it doesn't really matter who raised the lever: the pilot-in-command had caught me turning toward the landing threshold with our wheels UP and locked—a clearly defined no-no. It was impractical to question the issue while airborne, and soon obvious that nothing would be gained by pleading my case on the ground. Somewhat confused and intimidated, this little cadet kept his big mouth uncharacteristically closed: there had been no prior incidents of gear-near-misses and there would certainly not be any for me in the future. Meantime however, it was a bit painful to be rolling a T-33 main wheel from office to office along the flight line, seeking wise counsel and signatures from all unit commanders on a memo that began "Dear Sir, I am a clot!"

Clots or nots, those of us who survived initiation found more fun in the offing. After proving reasonably capable of controlling our bird in the circuit and in the flying area, we were given the opportunity to try flying it with IFR charts in our hands. The introductory triangle—Yorkton-Saskatoon-Regina-Brandon—prepared us for longer range navigation exercises that took us farther afield and gave us occasional overnights at exotic destinations such as CYOD Cold Lake, CYYC Calgary, CYOW Ottawa, and CYZD Toronto-Downsview. With a full 700-gallon load of fuel and the lower consumption afforded by higher altitudes, the T-Bird offered 2:30 of engine time whereby we climbed past Viscounts and Vanguards to cruise among the DC-8s and the B707s … albeit at a more sedately M.70.

This hands-on immersion into cross-country aeronautical navigation was an invaluable experience—a learning through osmosis to gradually understand the complexities of our airways system and to properly integrate with air traffic control procedures. While then learning the ropes in a single-engine turbojet, it was impossible to know that five years later I would be flying those same routes in a four-engine piston-powered bomber of WWII vintage; and then a year after that, cruising them in a state-of-the-art commercial airliner powered by three (3) fanjet engines. Time does indeed fly by when we're having fun.

Meanwhile, back home at CYPG Portage in early 1964, we T-Bird pilot trainees were introduced to jet-plane formation flying when barely six weeks into our training syllabus. Wow and more wow! From take-offs to landings, through aerobatics and all kinds of weather, it was an eagerly acquired skill and a lifelong thrill. Flying formation in the T-Bird is one of life's most pleasing activities and one of my fondest aviation memories. Flying on someone's wing, in four-plane *Finger* or three-plane *Vic*, it's just a matter of keeping his wing-tip navigation light lined up with his helmet and staying far enough away so as not to bump into him while trusting him to know where we're all going. When locked-on-in-the-zone, it's magical—kept smooth and stable by continuous infinitesimal adjustments to throttle and stick. Although there were rumours about pilots of a higher-plane overlapping or locking their tip tanks while in close formation, I was never intentionally a party to such things. Happily, wing-tip clearance was the mandatory minimum distance for pilot training purposes … notwithstanding student-pilot error and other life-enhancing moments of near-death. Another commonly flown formation is *Line Astern*—a simple matter of following the leader—close behind and slightly lower. The correct position is easily known by the feel of his exhaust tickling the top of your rudder: feeling no tickles means you are too low; seeing red up his tail pipe means you are about to be bounced outta there for an opportunity to practice formation rejoin.

Of course, among hours of pleasurable rush there were also moments of incredible hush. On one such occasion, while flying solo #4 in a four-plane that was executing a steep *echelon* turn to the left—aircraft all back-to-belly on the same horizon carrying at least 45 degrees of bank—the #3 bird suddenly disappeared downward out of view … completely out of view … leaving me in a perplexed what-to-do-now-state, studying slightly more distant rivets on the underside of #2 as some unknown power within cautioned me against saying or doing anything—when in doubt, do nothing. After a long 15 seconds or so, #3 popped back into position as suddenly as he had left, instantaneously returning my view-scape to the wide-screen format. As the old adage suggests, it's often better to be lucky than good, and fortunately this escapade did not turn ugly.

On a subsequent mission, after landing from an IFR approach as solo #2, the dual student in #1 asked how I enjoyed the slow roll in cloud on the way down. Although he may well have been simply tugging my chain, such a thing could have occurred, given the airplane's capabilities and a pilot's necessarily limited focus. Oh, to be young enough to do it all again …

Toward the end of our four-month flying syllabus we were introduced to low-level cross-country navigation exercises patterned after the strike-role mission of the front-line CF-104s. With plasticized flip-chart maps on our kneepads and some practice, we learned to follow zig-zag routes through Manitoba's less-populated Interlake District and beyond … flying within several hundred feet of the ground at several hundred miles per hour, aiming to remain within 100 yards of track and to reach the assigned target within 10 seconds of ETE (Estimated Time Enroute) … wasn't always easy, but it was always fun. On a memorable dual mission, one tip tank refused to gravity feed—not an uncommon occurrence—presenting the possibility of unmanageable lateral instability and/or critical fuel shortage: in either extreme case, canopy separation, ejection seat activation and a parachute ride was the bottom-line action recommended by the emergency procedures manual. For me, any lingering macho-notions about punching-out of a jet plane at any speed soon disappeared during high speed meditation on the frozen landscape close below. Fortunately, by employing intuition and great airmanship, my instructor coaxed our bird back to base and landed without incident, and without having to jettison the tip tanks. My sincere appreciation goes out to F/O George Richards for this timely action along with a plane-load of thanks for his course-long mentorship. However, there was still more to come.

As luck would have it, among a syllabus-ending flurry of formation flights and check rides, my last low-level navigation exercise was an unsupervised solo mission. Though consciously tempered by established guidelines, this last flight through the hinterland quickly accelerated into a blast of celebratory relief … cranking the turns and skimming the terrain … around the horn and racing south … up and over Riding Mountain and back down the other side … on track and on time … (well, close enough) … ta-da! Overhead the target, the urge to do a low-level victory roll was uncontrollable. Not intending it as attention-grabbing bravado, I delayed my entry until over a less populated part of the target area … in hopes no-one would see my tail number ... (as if there could possibly be any other T-Bird in the area at the time). The Golden Hawks were gone and the Snowbirds were yet to appear … graduation was ten days away and this might be my last solo flight in an aerobatic jet airplane. Let's finish it off like they do in the movies … just like you've done a hundred times before, Peter, just pull the nose up a bit and over we go …

HOLY MOTHER TUCKER—PETER! Underestimating the amount of nose-up attitude required and underestimating the gradient of gently rising terrain ahead, I engineered the so-far-scariest moment of my brief flying career. The situation may not have been as perilous as it seemed, but methinks a pinch of panic rudder accompanied completion of the roll. Phew! Aerobatics have a different perspective down here, and by attempting to emulate the Red Knight, I could have been a dead duck. Scampering up to 9,500 feet and flying straight home with my tail between my legs, I reflected on the good fortune of surviving my first attempt at low-level aerobatics and also on the amount of discomfort a smoking crater in the riverbank south of the target would have caused the fine air-force people who allow teenagers to fly their jet planes. Fortunately, there were no reports of irregularities coming from the target area and my air force wings were awarded ten days later. While this confession was a long time coming, the town of Minnedosa, Manitoba has always had a special place in my book of memories.

Learn from the mistakes of others—you'll not live long enough to make them all yourself.

4

The Bug Smasher

Within four days of receiving our cherished air force wings at Portage La Prairie on the 1st of May 1964, some of us were flying our first multi-engine conversion mission at nearby RCAF Station Rivers, Manitoba. Although the new airplane was slower, the training pace was as brisk as ever and the fact that we had graduated beyond the rank of Cadet was of little significance: Flying Officers with wings on their chest were expected to be equally attentive and ever more capable. We were back to the books at #1 Advanced Flying School where my 331:10 log book began to receive entries into the multi-engine column for the first time.

Our new steed was a workhorse with history. Coming out of its factory at Wichita, Kansas in 1937, the *Beech-18* had two engines, two vertical fins, and one tail wheel; its fabric-skinned control surfaces were attached to a durable, all-metal fuselage containing two pilots, six passengers, and a bit of freight. When WWII accelerated the need for small utility transports and air taxis, this utilitarian "Twin Beech" was soon in mass production, eventually supplying scores of differing models to scores of operators worldwide. In continual production until 1969, many of the 9,000 units built are still flying today.

Most military versions of the Twin Beech, widely known as the *C-45*, were powered by the 9-cylinder Pratt and Whitney R-985 *Wasp Junior* radial engine rated at 450-horsepower, a scaled-down version of the 600-horsepower engine in the Harvard. As early as 1939, the RCAF began importing 388 of their C-45 *Expeditor* aircraft to see service as light transports, air taxis, photo-reconnaissance platforms, light-bombing trainers, navigation trainers, and of course, as pilot trainers. During three decades of continuous operation in the Canadian military, C-45s were widely flown and surprisingly loved. Of similar dimension, but with half the weight and one quarter of the engine horsepower, the Expeditor flew much slower and far lower than last week's T-Bird. Nevertheless, this twin-engine, tail-wheel piston-powered airplane carried a lot of fun as well as many lessons for any aviator who cared to try. Forever and always, she is fondly remembered as the *Bug Smasher.*

“Engine failure! Engine #1.” Ironically, simulated engine failures and engine-failure procedures are practiced far more often on multi-engine airplanes than on those with only one engine. A probable rationale suggests it is all or nothing on the single—if the engine doesn’t restart, you bail out or force land—whereas with two or more engines, regardless of any restart possibility, you are expected to minimize the damage and carry on as best you can with any necessary adjustments to fuel, electric, and hydraulic systems. More to the point: without an ejection seat or parachute to worry about, you have little option but to head for the nearest runway you can find. Meanwhile in training, without aerobatics to practice, formations to fly, or low-level missions to target, we had few other diversions from the drudgery of instrument-flight practice. Therefore, while learning to keep the Bug Smasher under control through all phases of flight, we practiced one engine failure after another, especially during that critical phase of flight when engine power is highest and airspeed is lowest. Before long, any take-off without a simulated engine failure—one throttle lever suddenly retarded—seemed like an abnormal procedure. The old FMS check (Fuel-Mixture-Switches) became a life-enhancing mantra, constantly keeping us in tune with our universe ... “Engine failure! Engine #2.”

When not practicing such things in the air, we practiced them in the GPT (General Procedures Trainer) which was a welcome step beyond the Link trainer. Roughly patterned on the C-119 *Flying Boxcar*, it featured a two-engine working cockpit layout wired to a master control panel. Although it didn’t move around like the spring-loaded Link, the GPT’s controls and instruments certainly did: all engine and flight control handles looked like the real things and operated as one might expect while the forward instrument panel duly reflected any configuration changes. With appropriate navigational inputs joining a dynamic display of attitude, altitude, and airspeed, it was easy to become lost in that nether world … while a felt-tipped marker left inky tracks across a plasticized map at the instructor’s panel. Although a crude ancestor of today’s sophisticated three-axis flight simulators, the fixed-base GPT did offer a semi-realistic place to practice cockpit procedures while learning instrument approach profiles.

Back in the Bug Smasher, we were able to practice all of the above while motoring around the Prairie Provinces. Sincere thanks go to my mutual flying partner, good friend, and long-time roommate John Salter, and to our learned and ever-helpful instructor Mel Henderson. Barely sixty days after it began, our conversion course at RCAF Rivers was suddenly complete and my pilot logbook had recorded its first 84:30 of multi-engine time.

Summer of ‘64 was spent at RCAF Station Winnipeg, attached to ANS (Air Navigation School), helping fly navigators-in-training around the countryside. While hardly exciting work, it was a good way to maintain competency on the C-45 without being in flight school: being casually judged and evaluated is easier to take than being constantly tested and tried. Though, in the flying business, school may be out of sight, the learning process is always near at hand: my next training exercise took me to the bush—Summer Bush—a ground-based survival training exercise conducted in Athabasca country near Hinton, Alberta where several days of late-summer snow absolved most of us from any desire to attend Winter Bush.

Soon thereafter, while enroute to my initial operational posting in Atlantic Canada, a long-overdue visit home to Goderich helped bring me up to speed with local events and to reconnect with my aviation roots. Sadly, in March of that year, the entire community and a large segment of the aviation fraternity had been shocked by the early demise of Keith "Hoppy" Hopkinson whose unforeseen health issue contributed to the crash of his Beech-18 on approach to Goderich. Although neither the town nor the airport seemed quite the same without his persona, Keith's spirit continued to hover nearby. Before his last flight, he had been part of a team working toward acquisition of a WWII-vintage Avro *Lancaster* bomber, one of the last three being retired by the RCAF. That summer of 1964 had seen one of the retired "Lancs" flown into CYGD Goderich where it was mounted on a pylon at the airport entrance. Erected as a memorial tribute to the British Commonwealth Air Training Plan, it also served as an unofficial memorial to Hoppy, a WWII BCATP administrator who had become owner/operator of Sky Harbour. As a very active member of the Experimental Aircraft Association, Keith Hopkinson was well-known throughout North America for his promotion of aviation and for his endless stream of new ideas. His home-built Stits *Playboy*, Canada's first, is appropriately preserved at the Canadian Aviation and Space Museum in Ottawa. Thanks for giving me a start Keith.

As a member of the local Rotary Club in those days, my father became associated with the Lancaster restoration team along with members of the Royal Canadian Legion and other community organizations. Unfortunately, the noble gesture represented by the "airborne" Lancaster was soon lost in flurries of graffiti and vandalism. Fortunately however, in 1978, this well-experienced and weather-beaten four-engine icon was purchased by a local aviation enthusiast, airlifted from its pylon, and donated to the Canadian Warplane Heritage Museum in Hamilton where it was fully restored to flying condition over the ensuing ten years. Today it is one of only two fully operational Lancasters flying in the world. Universal appreciation must go to Bruce Sully for his vision and to the many restoration addicts who helped make it happen.

Meanwhile, on my way to the east coast in the autumn of ’64, a conversation with airplane-buffs in the hangar at Sky Harbour introduced one of my life’s very special happenings. Honouring my recent air force experience, these gentlemen offered me the opportunity of taking a solo spin in their pet Harvard. Harvard! Without hesitation, a quick telephone call summoned my father from his downtown office; having been here with his car headlights helping illuminate my J-3 arrival two years prior as well as being at this year’s wings presentation, he certainly deserved to be here-now for this one. Despite T-Bird and Bug Smasher indoctrination since, the old Yellow Peril seemed surprisingly familiar … its engine start is always pure joy.

Once airborne over the shoreline of Lake Huron, we began boring holes in the sky at a great rate, demonstrating stalls and spins before urging the yellow bird to fly whatever it could manage of whatever I could remember of my T-33 aerobatic sequence. Who needs parachutes? Finishing with a high-speed low-pass down the hangar line and a victory roll off the end seemed like the natural exclamation-mark with which to conclude our adventure … not quite. Discretion and sober second thought carried the day with a steep pull-up and a semi-closed pattern landing on the grassy runway. There would be no low-level aerobatics attempted in the Harvard on this day.

Perhaps, residual fear-awareness from my recent low-level T-Bird experience had allowed the oft-heard adage to finally penetrate my twenty-year-old brain. Wherever it might have come from, that day’s cautionary approach may have contributed to the longevity that permits telling of the story; and in any event, it is hoped that successful completion of that day’s flight helped reward my father for his lifetime of support and for his encouragement of my career choice. Thanks Dad.

There are old pilots and there are bold pilots—but there are no old, bold pilots.

The Moose Jaw “Goldilocks” c.1963

Footnotes and Postscripts

1. Although its once-renowned paint shop is no longer in operation, **CYGD** Goderich Municipal Airport now celebrates two paved and lighted runways as well as a small terminal building.

2. From origins at **Sky Harbour**, *John Hopkinson and Associates* is an aircraft brokerage firm that continues to operate from bases in Calgary and Phoenix.

5
AWATS

Late autumn of 1964 found me sitting in the pre-dawn glow of two coin-operated dispensing machines inside an otherwise deserted ferry terminal at Cape Tormentine, New Brunswick … with ample time and space for thoughtful reflection. As life would have it, my first operational posting in the Royal Canadian Air Force had assigned me to the type of work previously flown by the iconic Lancaster that had recently caught my attention on a pylon at the airfield where my flying lessons had first begun barely two years before. Now, I was heading for my first real flying job, patrolling the North Atlantic Ocean from a base on our eastern seaboard. By this time, the cold-war threat of Soviet submarines and an increase in Canada's geographic area of responsibility had necessitated a newer, larger aircraft—the CP-107 *Argus.*

In the light of dispensing-machine retrospection came cynical chuckles about my longstanding desire for an overseas posting … nine miles wasn't far, but it was somewhere. On the other side of Northumberland Strait, Port Borden, Prince Edward Island was gateway to the Garden of the Gulf, a 140-mile-long island that narrows down to a 4-mile-wide waist hosting the province's second-largest city and its adjacent air force base, RCAF Station Summerside. Known to the international aviation community as CYSU, it was my current destination and new hometown where 415 *Swordfish* Squadron would become my new way of life. Unbeknownst on the inbound leg, a four-year sojourn there would endear me to the place and to many people who call it home. When not bountifully adorned in winter's white gleam, *The Island* is a rolling green pasture gently framed by sandy beaches … though often in the spring season, hash-marked by side roads mired in deep-red mud. For many travelling islanders, relentless years of inescapable procedure and nothing-newness gradually imbues a quirky-warm appreciation for the Northumberland Strait ferry crossing where *Port Boredom* and *Cape Tormenting* are but two names on the map.

"Welcome to Station Flight" was the warmly straightforward greeting offered by Flight Lieutenant Al Wolfenden, the habitually warm and straightforward OIC (Officer in Command). A youngish middle-aged veteran with experience on numerous aircraft, Al was in charge of Station Flight, a small self-contained unit on Summerside's hangar line having dedicated technicians responsible for one GPT and two C-45 aircraft. While awaiting entry to the training unit and qualification for operational squadron duty, new pilots were often temporarily assigned to Station Flight where we could practice IFR procedures in the GPT and hone our Bridge games around the coffee table when not ferrying people and parts around Maritime Command and beyond in Expeditors #2333 and #2347. In short order, *Two-Triple-Three* and *Three-Forty-Seven* became fondly remembered Bug Smashers with personalities of their own. For us, AWATS (Al Wolfenden's Air Taxi Service) became an effective operational training unit in its own right, as well as being a great source of fun … "It's good to have you aboard, Pete; go to Shearwater with Wilf in Three-Forty-Seven and pick up two airmen and some paperwork for the OTU," directed F/L Wolfenden.

"I'd love to, Sir; but, don't I need a unit check-ride or something?" responded the newcomer sporting his Training Command conditioning.

"What are those things?" asked the OIC, pointing to my chest.

"Wings," I replied.

"Good answer," said the man in charge; "I suggest you get out there and use them."

"Yes-Sir-Okay-Boss" was the only response possible.

Flown with Wilf Bradbury, a slightly more-senior fellow-fledgling, that short return flight to Navy Shearwater (Halifax) on October 28, 1964 was my introduction to the "flying for a living" concept that had motivated my career choice; it also marked the beginning of an excellent advanced flight training program that could not have occurred at any other time or place—a winter of flying the C-45 from a base in Atlantic Canada. Often cycling between the related Maritime Command airfields of CYAW Shearwater and CYZX Greenwood, we also found reason to visit all major airports in Atlantic Canada as well as the USN base at Brunswick, Maine (KNHZ). Longer-range missions took us farther west, touching down at most civilian and all military airports between CYQB Quebec City and CYQG Windsor. Occasionally, my full-time Bug Smasher vocation revisited CYCE Centralia and CYGD Goderich where it had all begun.

While adding hours to the logbook and experience to the resumé, we also learned some hard lessons from the weatherman: for starters, we soon came to know the difference between a *St. Lawrence Low* and a *Hatteras Low*; more importantly, we came to understand what happens to the lower atmosphere when these two pressure patterns collide in the vicinity of Cape Race, Newfoundland. Well before reporting to our assigned squadrons, we were given close-up looks at how "interestingly uncomfortable" east-coast weather could be … while finding out how poor *poor visibility* was and how deep *deep snow* was, we also got a grip on how slippery *slippery* was. Becoming adeptly familiar with Carburetor Heat and Wing De-icing Boots, we also came to regard the Outside Air Temperature gauge as a primary flight instrument. Along the way, fellow pilot Ron Uruski pioneered the technique for landing the C-45 in severe Freezing Rain—the left arm is extended through an opened direct-vision corner window and employs a plastic identification card to scrape a small aperture into an otherwise opaque forward window … necessity is indeed the mother of invention. Weather lessons from Atlantic Canada would remain with us always as valuable tools of the trade in the business of flying airplanes … *nobody said it would be easy.*

As many before me could attest, that first PEI winter seemed particularly long and harsh … as well as deep; nevertheless, helped by boundless bravado and a touch of human pride, familiarity would soon redefine one's idea of normal while small mistakes were sowing the seeds for large stories best saved for another time. The spring thaw of 1965 marked my entry into the world of ASW (Anti-Submarine Warfare) with training courses on the P2V7 *Neptune* and CP-107 *Argus* before being assigned to 415 Squadron. For much of the following fourteen months, squadron duties were interwoven with volunteer efforts on the Expeditors of Station Flight: for a time, there was ample bug-smashing to be done and it was a good mix for me. However, when squadron responsibilities increased and Station Flight began to down-size, my volunteer duties gradually ground to a halt.

My last flight on the C-45 Expeditor is memorable for its abnormal crew complement as well as for its abnormal airplane behavior. Because rules of the day allowed another *non-pilot* aircrew to occupy a cockpit seat if a second certified pilot was unavailable—under certain long-forgotten conditions—this particular flight would be operated by one pilot and one navigator. Although one-pilot operation was authorized in civilian aviation for the C-45/B-18 equivalents, it was not normally allowed in the military to protect against the risk of unforeseen medical catastrophe (such as happened with Keith Hopkinson). Although rumours did occasionally circulate about one-pilot operations in RCAF Bug Smashers when away from home base, I know nothing about such things. However, I do know that on December 28, 1966, having been retired by Station Flight, C-45 Expeditor 2347 departed CYSU Summerside on its last AWATS mission … devoid of passengers and freight; it was a ferry-flight delivery to CYZD Toronto-Downsview with 415 Squadron navigator Jim Franko occupying the right-hand cockpit seat.

Soon after re-entering Canadian airspace west of Millinocket, Maine, airway navigation seemed unusually difficult for such relatively light winds, and approaching Montreal Terminal airspace, compass readings began to be suspect. Having no previous experience with such syndrome, the pilot-in-command was perplexed, and having no LORAN or sextant at hand, the navigator was unable to assist in accustomed fashion. Instead, the navigator/pilot got busy looking through breaks in the cloud for surface features to correlate with his topographical map while his pilot/pilot partner did everything possible to prevent triggering any alarms down at air traffic control. Eureka! Soon after passing Ottawa, warning lights on the panel and a complete compass failure brought a sudden end to any confusion about our navigational prowess … while the sight of white smoke billowing out from beneath Navigator Jim's seat identified the source of concern—the whatchamacallit-invertery thing that lived down there had died a fiery death—*Master Switches OFF!* With aid of a battery and one VHF radio, we successfully diverted into RCAF Trenton (CYTR) and hopped a bus to Toronto. That was the end of that.

Although buddy John Salter had once diverted to Sherbrooke PQ with an engine failure while flying that same route, this particular electrical fault was my only electro-mechanical misfortune during 550 hours on the C-45 Expeditor. Though perhaps seen as the sad end to a long affair, I suggest that this easy straightforward recovery from an extremely rare event provides testament to the honest reliability of that aircraft: the old Bug Smasher would get honourable mention on my list of favourite airplanes. While the unique flight-entity known as AWATS would be missed, my friendship with its maestro would continue on base and beyond: F/L Al Wolfenden was a lesson in leadership and a pleasure to work with. Thanks Boss.

6

The Long Rangers

Back to school! April 1965 brought entry into RCAF Summerside's #2 (M) OTU where (M) for Maritime introduced oceans of information about salty water and the means for finding things in it and for finding a way over it. Introduced to the concepts of celestial navigation and radio-wave long range radio navigation (LORAN), we learned something about bombs and torpedoes before moving on to the every-day tools of Anti-Submarine Warfare (ASW).

First on the list were *sonobuoys,* the primary tools of the trade: light-weight aluminum cylinders, five inches in diameter and three feet in length, pneumatically ejected downward from reloadable chambers in the aircraft's aft equipment bay, they auto-rotate "gently" downward, helicopter-style, with a self-deploying blade assembly on their top end. Once floating upright at the ocean surface, the buoy releases its wire-held hydrophone to a preselected depth while deploying a radio antenna upwards, whereupon a saltwater-activated battery begins transmitting acoustic information on one of many discreet frequencies for a predetermined period of time. Got it? Also dispensed from the aircraft's aft equipment bay were small TNT-loaded signal underwater sound charges *(SUS)* that explode underwater, creating sound waves to be utilized in conjunction with sonobuoys for sonar detection and localization of large submerged metal objects that reflect sound energy. Also included in the aft equipment bay arsenal was a compatible quantity of *smoke-flares* programmed to launch directly rearward at the same speed the aircraft is moving forward, providing accurate visible markers for sonobuoys and any submerged targets of interest. Along with information about ocean depths and sound attenuation, we were exposed to the semi-secret worlds of *Julie* and *Jezebel,* two sensors who could detect and locate small metal objects in vast bodies of water. Some pilots learned something about some of this stuff, but most pilots understood mostly nothing about most of it. However, should a target submarine ever be localized into a small area at a known location, pilot interest increased dramatically with use of the *Magnetic Anomaly Detection* system (MAD). Electromagnetic isolation on the aircraft's tail-boom allowed MAD to pinpoint a submarine's position and to facilitate an attack. Foremost among lessons learned at the OTU was the need to recognize complexity of the task and the need for tactical integration of the numerous systems and talents onboard. The term *Crew Concept* acquired a much broader meaning. Meanwhile, the idea of flying around at 400 feet with the bomb-doors open, cranking steep turns over the smokes and dropping bombs on the bad guys seemed like patriotic fun in the offing.

After memorizing some numbers and studying its operation, we were introduced to a mighty fine airplane, the Lockheed P2V7 *Neptune.* Developed as a twin-engine patrol aircraft for the U.S. Navy in the late 1940s, the piston-powered P-2 became the P2V7 with later addition of two 3,400-lb-thrust Westinghouse *J34* turbojets joining its two 3,700-hp R3350 Wright *Cyclone* 18-cylinder radial engines, each driving a four-bladed propeller; for weight and simplicity all engines burned the same 115/145 Avgas. With two turning and two burning, the Neptune was rumoured to out climb a T-Bird to 10,000 feet … or so the story goes … impressive in any case. Measuring 30′ in height and 92′ in length with a wingspan of 102′, the significantly larger Neptune weighs ten times as much as the C-45 Expeditor. With fuel tanks for wing tips, a radome for a chin, a MAD boom for a tail, and a belly-full of bomb bay, this 80,000-pound sub-hunter looked as if it meant business.

In fact, it was also then still in business as the operational sub-hunter for 407 Squadron at RCAF Station Comox in British Columbia. Of 359 units produced in the 1950s, 25 P2V7s were acquired by the RCAF for active duty as well as for ASW flight training.

Getting us down to business over the Gulf of St. Lawrence with a seven-man crew of trainees and three instructors, the *PeeTwoVee* was a treat to fly—fast, solid, and responsive. Lighting the jets with simple two-finger application of two spring-loaded toggle switches was a true power trip.

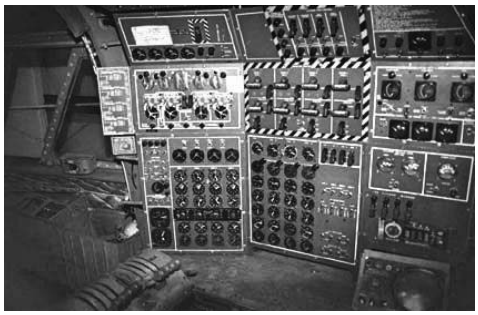
Very quickly, this much heavier and far more complex machine inspired respect for onboard flight engineers who were often the most vital of crewmembers, taking care of engines and critical systems while often adding welcome experience to the mix. When permitted by operational circumstance, my airplane familiarization visits into the aft "department of navigation and detection" inspired empathy for my fellow humans who were usually sitting sideways in the dark and subjected to g-forces while trying to focus on oscillating tubes and flickering needles. My appreciation for these people was destined to increase. Meanwhile, the *Code of Neptune* stipulated that any crew member, regardless of rank or position, who dropped the trapdoor to the nose-cone with the sudden sound of an engine backfire was thereby required to donate a case of beer to the mission debriefing. Elementary school ended with the month of June and added 91:45 of P2V7 *Neptune* time into the book. Thank you Bill Misener.

After a brief summer vacation and a bit of bug smashing, August opened the doors to secondary school over at RCAF Station Greenwood, Nova Scotia where we became accustomed to a much larger crew and to a much larger aircraft. Measuring 38′ in height and 128′ in length with a wingspan of 142′, the 157,000-pound CP-107 *Argus* was almost twice as heavy as the Neptune, and its 16-man operational crew was twice as large. First stop on the path to conversion was the Argus OFT (Operational Flight Trainer) which was essentially two separate training platforms in close proximity: one was a cockpit mock-up for pilots and flight engineers; the other was a replicated interior fuselage section for navigators and radio officers (Navs and ROs). Though capable of being electronically joined in spirit by integrating actions and by sharing information for a commonly assigned mission, my aging memory suggests the two sections most often remained aloof while focussing on their role-specific challenges. The back-end "electric zone" was all switches, knobs, and needles associated with a full array of gizmos for navigating airplanes and detecting submarines; although some pilots eventually became somewhat familiar with some of it, most pilots never did understand most of it. By contrast, the OFT's "pointy end" was more pilot friendly: mostly handles, levers, and wheels associated with manual controls for flying the airplane. Like a custom-made GPT, this pilot trainer was a replicated Argus cockpit wired to a master-control simulator panel, allowing pilots to utilize aircraft type-specific controls and check-lists while spreading ink around the surface plot.

After one introductory session in the OFT, we got our hands on the big bird itself; yes, two hands were often better than one for this large craft with a unique flight control system and its artificial-feel component. In the mid-1950s, Canadair of Montreal re-engineered the existing Bristol *Britannia* template into an RCAF-worthy long-range maritime reconnaissance aircraft to replace the ancient Lancasters and aging Neptunes. For starters, the pressurized airline fuselage was replaced with a lighter non-pressurized one, and its turboprop engines were replaced with piston engines for better low-level endurance. Supporting its ASW role, there was a MAD-boom extension on the tail, a large radome under the nose, and a 70-million candlepower searchlight on the wing; despite having fourteen feet of fuselage removed, the new sub-hunter still had room for two huge bomb bays in its belly section. The early production Mk1 series are identified by their bulbous chin-beard that houses an APS-20 radar antenna while the later Mk2 versions sport a sleeker ASV-21 goatee.

Canadair's production model CL-28, as it was first known, also underwent significant interior alterations to meet air force specifications. The rearmost section became largely devoted to storage for sonobuoys and other expendables in close proximity to their launching devices; also aft of the port-side entry door, each sidewall featured a convex look-out window with a dedicated crew seat. Immediately forward of this relatively bright and spacious entry hall came the windowless electronics compartment where all the ASW sensors and detectors would do their dark work. Forward of this gizmo gallery was a galley-style kitchen and four crew-rest bunks situated over the wing between the engines. Forward of that, the primary (routine) navigator's station and the HF radio operator's position flanked entrance to the flight deck which featured a crawl-space to the nose-cone as well as a ladder to the roof-hatch above.

Cockpit windshields and side windows were designed suitably large. And, while the pilots' forward instrument panel looked sparse, the flight engineer's starboard side panel certainly did not: it was an office onto itself with all necessary switches, levers, dials, and actuators to manage heat and light for the entire aircraft as well as control for all engine-related systems. Back at his position, the flight engineer had a duplicate set of engine controls directly linked to the pilots' controls on the forward console: with four throttles, four mixture controls, and a propeller pitch control, he was *the man* primarily responsible for the four 3700-horsepower R3350 Wright *Cyclone* 18-cylinder radial engines, each with three PRT (Power Recovery Turbine) turbo-chargers and water injection powering its 15-foot 3-bladed propeller …



… "chocks installed, all clear for engine start."

With four turning and none burning, we were on our way in the CP-107 Argus … not always a pretty sight on the outside … with cockpit-controlled integral gust locks disengaged, wind and gravity can cause its *free-floating* control surfaces to assume unnatural-looking positions; and with gust locks engaged, both ailerons are locked in the deflected-up position. More than one unfamiliar air traffic controller had become alarmed by the sight of both ailerons deflected in the same direction. However, when subjected to some speed and sufficient airflow, they fly into aerodynamic alignment and operate normally by pilot input to their small *control tabs*, similar to trim tabs, that move the control surfaces in the desired direction. Once airborne, instructor Ken Waterhouse began showing the Argus ropes to Gary Kirk and myself while instructor Jack Smith helped flight engineer Bill Campbell get a handle on his new responsibilities, numerous as they were. For all us newcomers, it took some getting used to—the pilots call out the desired engine power settings and the flight engineer makes all throttle adjustments throughout almost all phases of flight. Except when applying reverse thrust with the throttles after landing, pilots rarely have their hands on power, pitch, or mixture controls. Meanwhile, oil cooler doors, cowl flaps, and water injection controls remained out of sight and mostly out of mind … along with myriad indicators and actuators relating to electricity generation, hydraulic pressurization, and cabin air temperature. Other major engineering items included electric propeller de-icers and a mega-BTU hot air furnace for de-icing wings and tail empennage. Necessity would soon teach us more about these systems.

Meanwhile, we were busy learning how to land a broad-winged, stiff-legged bird with free-floating control surfaces that seemed to lose effectiveness at very slow speeds. In fact, whatever the limiting factors might have been, this four-engine state-of-the-art flying machine had a 17-knot crosswind limitation, and in practice was no more capable than the Harvard and Expeditor tail-draggers of the 1930s. Other than one mini-cross-country excursion and some instrument approach practice, the order of the day for most days was a long series of take-offs and landings, especially touch-and-goes with simulated engine failures. While the loss of one engine among four proved easy enough to manage, simultaneous loss of two engines on the same side always managed to raise the excitement level; and with an eclectic assortment of landing styles, we gradually got to know something of the big bird. After 15:00 in the OFT and 52:00 in the airplane, the CP-107 *Argus* conversion course was completed in just 30 days. Thanks Ken.

Argus #727 in this file photo had crashed with loss of her entire crew five months prior to our course

7

The Squadron

In September 1965, completion of the Argus conversion course at RCAF Greenwood saw me back in RCAF Station Summerside and reporting for duty at 415 (MP) Squadron. As the new Second Officer (third pilot) on Crew 1 captained by Doug Forbes, my first mission on the Argus was a delightful *Battle of Britain* formation fly-past over The Citadel in Halifax. Soon thereafter, several short crew training exercises prefaced the new long-range reality: a 14-hour patrol over the North Atlantic Ocean finished in Cornwall, England, at RAF Station St. Mawgan (EGDG) for a set of two 14-hour *Totempole* missions before flying another 14-hour patrol home. It got worse … well, the patrols got longer: 12-18 hours was normal; 20-24 was not unknown.

Soon after returning from England, we were off to Scotland in similar fashion: patrols there and back book-ended numerous others flown during a two-week detachment at RAF Station Kinloss (EGQK) near Inverness. After some time off at year's end, we were off to "The Rock" … LXGB Gibraltar that is … the rock of Newfoundland would come later. As well as flying the customary patrols, our route to "Gib" took us to the Azores, the Portuguese islands on an eastern lobe of the mid-Atlantic Ridge where Lajes Field on Terceira has long been a NATO-friendly refuelling depot. With an established USAF/USN presence on the base and with authentic cuisine nearby, LPLA Lajes was an oft-visited tourist attraction for weary sub-hunters from both sides of the ocean. Whenever cross-winds from an Atlantic gale proved too much for its one runway, we would have to divert to LPPT Lisbon on the mainland … oh darn, not again!

As well as looking and listening for hostile submarines, open-ocean patrols also monitored surface shipping, allowing our lingering monotony to be interrupted by a 100-foot (thereabouts) photographic strafe of freighters, tankers, and cruise ships while entering their name, position, and direction of travel into our mission log. Closer to home, *Beachcomber* patrols monitored extensive international fishing fleets along our east coast where, among an astounding number of such vessels working the area, special attention was always given to the Russian ELINT trawlers known to be spying on North American industry and commerce as well as eavesdropping on its military transmissions. Way back then, coastal missions also brought *Javex* and *Marlex* training exercises with the Royal Canadian Navy and an opportunity to work with *HMCS Bonaventure,* our one and only aircraft carrier, and its fleet of two-engine *Tracker*s (CS2F "Stoofs") alongside our destroyer escorts and their *Sea King* helicopters.

Other training exercises took us farther afield (asea?). An annual one-week detachment to Kindley Field in Bermuda (TXKF) facilitated *Subex* exercises whereby one Argus crew after another would chase a Canadian submarine with sonobuoys and SUS charges until no one, above or below sea level, could take it anymore. On completion of one such exercise, while rehydrating bar-side after a long day's mission on rented motor scooters, keen-eyed Argus crew members watched their "enemy of the week" berth dock-side in St. George's Harbour. As soon as their boat's lines were fast, a herd of bombed-out submariners abandoned ship in a continuous stream of bodies erupting from a conning-tower hatch and pouring into an aquamarine sea. Our subsequent familiarization visit aboard this Royal Canadian Navy diesel-electric "O-boat" exposed the source of that human eruption—an interior work *and* living space sufficiently claustrophobic so as to inspire enhanced appreciation for our spacious work and rest areas in the airplane.

A successful check ride in May of '66 qualified me to fly as First Officer with the crew now captained by Andy Normand. While the term "qualified" may be open to interpretation, flying in Maritime Command was obviously good for the logbook: two years after receiving my wings on the T-Bird, there were now 1,500 hours in my logbook including 600 hours of four-engine Argus time for seven months on squadron. Of course, for long-range aircrew, these totals include "bunk time" whereby each pilot, subject to circumstance, gets two hours of rest between each four-hour duty cycle: after flying two hours in the right seat followed by two hours in the left seat, a fatigued pilot could enjoy two hours "off" by trying to sleep between four growling engines and four snarling propellers adjacent to the galley area where strong cooking odors and animated conversations enthusiastically mingle … and somehow, the sound of the fridge door and the pop-up toaster could penetrate the hearty roar of four R3350 Cyclones. All crew members "enjoyed" a similar duty/rest cycle while sharing these onboard amenities.

A standard crew usually consisted of 3 pilots (sometimes 4), 2 flight engineers, 3 navigators, and 7 radio officers. Traditionally, the pilot in the left seat did all the flying—including take-offs and landings—while the pilot in the right seat assisted with procedures and handled the VHF radio work. Navigators rotated through two stations: their forward *Routine* desk was responsible for ascertaining aircraft position and maintaining track, via Celestial, LORAN and all other means; their aft *Tactical* desk was responsible for plotting and coordinating mission procedures, aided by an inertia-related, motion-sensitive, magic-tracking device that somehow shines a present-position light on the plotting chart. The seven radio officers rotated through numerous positions while manning a variety of semi-secret electronic detection devices; they were also responsible for HF radio communications and for radar surveillance, including finely tuned radar-homing to items large and small. When not spotting smokes, and marking targets from the bomb-aimer's nose-cone bubble or operating a camera at one of the aft look-outs, these highly talented multi-taskers were loading smokes, SUS charges, and sonobuoys into aft-cabin launchers while struggling with all sorts of turbulence and a variety of suddenly imposed g-forces.

Another semi-regular detachment known as *Torpex* took us to "Rosy Roads"—Roosevelt Roads Naval Air Station in Puerto Rico (TJNR)—to test drive our torpedoes (with dummy warheads) in the ocean's adjacent deep-water trench.

For crewmembers, usually ROs, who were loading sonobuoys, smoke-markers, and sound-charges into launchers during these low altitude, high-g procedures, the ride at the back of the bus could be uncomfortable even in smooth air; in tropical heat and recycled tobacco smoke, it could be downright ugly. Up front in the darkened cockpit, while trying to maintain 300 feet on the radar altimeter and searching for a horizon-line between an ocean of flares and a universe of stars, we were too busy to think about Argus 727 and its entire crew that disappeared here the previous year while doing the exact same thing.

Back at home base, recently acquired First Officer status allowed me to sign-out as Argus captain for non-operational missions such as pilot training (*aircraft* captain vs. *crew* captain). Practicing circuits and bumps is usually a good idea for any pilot; it was always a very good idea for us rusty long-rangers who only got a chance to land our airplane once every third or fourth mission. After having performed only one or two operational landings per month, an intense two-pilot training session was the most effective way to re-polish the skills. Fittingly, my first 415 Squadron sign-out was for a pilot-training session with another recently upgraded First Officer, my long-time Expeditor-buddy Ron Uruski … same-old lighthearted professionalism on a big-new airplane.

On November 4, 1966, a similar pilot-training exercise with my squadron commander, Wing Commander Joe Pierpoint, was cut short by a message from base ops advising that one of our airplanes was in trouble. Argus 712 had suffered failure of its elevator controls while on task over the Atlantic. Although pilot intuition and quick thinking had prevented instant tragedy, Captain Normand and *Crew 5* were still in dire straits, trying to coax their bird safely home by judicious use of engine power and cautious operation of the large cockpit trim wheel that controlled the little trim tab way back on the big elevator surface.

Returning our pilot trainer to its hangar, we hopped aboard Argus 719 with Captain Shumka to help escort the injured Argus 712 and its crew to RCAF Chatham, New Brunswick (CYCH) where a longer runway and less crosswind offered improved chances for a successful landing ....

DINGHY! DINGHY! DINGHY!
PREPARE FOR DITCHING … PREPARE FOR DITCHING

These words over the aircraft intercom caused instant alarm and immediate action … as they were meant to do. No, this was not a practice drill. The captain's voice was unmistakable and the urgency of his command was undeniable, though it came out of the blue and without warning. The several high-g flight manoeuvres occurring just before his call to action seemed nothing unusual to those operating in the back end of their CP-107 Argus sub-hunter … it was the norm … until now! Momentarily stunned by surprise, a plane-load of professionally trained aviators sprang into action, waking-up the bunk sleepers and tuning-in the disbelievers while coming to grips with the enormity of their situation. Okay then! How many dinghies do we have? Where are they? Who's responsible for them? What else must we take? What else should we take?

Motivated by circumstance and fuelled by adrenalin, four Pilots, two Flight Engineers, three Navigators and seven Radio Officers became quickly reacquainted with their emergency procedures checklists, paying particular attention to the one about ditching—landing on the water and transferring to inflatable rafts. While a lucky few had once flown in a floatplane, no one aboard this 150,000-pound behemoth had ever been forced to land on water in a wheel-driven airplane that had no floats … on any kind of water. Furthermore, even the most inexperienced of crewmembers had already gained healthy respect for the sea, especially for their traditional territory: The North Atlantic Ocean wasn't a pretty sight much of the time and it inspired less-than pretty thoughts on this day. Suffice to say, the worst-case scenario comes across as a simple prelude to suicide … think 50-foot waves and 50-knot winds … whereby instant death on impact seems mercifully better than being flung from a fractured airframe into hell's freezing abyss. Best case scenarios, however, are considered imminently more survivable … assuming a smooth into-wind touchdown on the backside of a broad swell and assuming acceptable levels of water intake during disembarkation and no subsequent raft irregularities, keeping in mind the fact that even when flat calm, that ocean can freeze the life out of a human being in very short order. Happily, today's fairly moderate conditions offered them fairly good odds. Nevertheless, to ease their minds while lightening their load, the well-trained flight crew onboard Argus #20712 on the 4th day of November in the year 1966 strictly adhered to their ditching checklist by gathering up every loose item and sending it overboard. Seen as primarily expendable were the 120 high-tech sonobuoys, scores of heavy SUS charges (underwater explosives), and scores of no-longer-necessary smoke markers that were unceremoniously jettisoned. Had they been carried that day, all bombs and torpedoes would also have been released from the bomb bays … targets or no targets, economic factors had slipped to the bottom of the bucket list.

Oh, how quickly life can change in the world of aviation. Barely three hours earlier, Crew #5 of 415 (Maritime Patrol) Squadron departed their CYSU Summerside base on a "piece of cake" patrol over local waters. Seen as welcome relief from the usual 18-hour overnighter far from home in marginal weather, this was scheduled to be a 6-hour daylight mission in good weather … and instead of listening for a submerged needle in a liquid haystack they were simply tasked with re-marking an established datum point near Sable Island off Nova Scotia's south shore before heading straight home. Too good to be true, it seems.

Soon after arriving on task, and in keeping with standard seat-change procedures, the crew's captain, Andy Normand, slid into the left-hand pilot seat to begin his first two-hour stint at the controls while Gene Roy climbed into the right seat to assist with communications and procedures. The other two pilots (Gary Kirk and Ron Statia) were concurrently enjoying the crew-rest phase of the rotational duty cycle. Interestingly, Captain Andy Normand, now in the left seat, was a *temp* … filling in for Crew 5's official captain (Greg Lister) who was on sick-call that day. Now in the right seat, Gene Roy was the newest and most junior Second Officer on that crew, but a seasoned pilot who brought considerable experience from elsewhere. Retrospect strongly suggests their seat assignments to have been fortuitous.

While cruising along straight and level at 500' on autopilot, Argus 712 suddenly pitched-up into a nose-high attitude and began climbing toward a stalled-wing condition. The reflexive attempt at corrective action found the control column to be firmly fixed in the fore and aft plane … it was locked in place and wouldn't move in either direction … elevator control was lost … aileron control seemed normal with free yoke rotation in both directions … autopilot was immediately switched OFF. Recalling a procedure for runaway trim on the previously flown P2V7 Neptune, Andy applied 45° of bank in a left turn to maintain a semblance of altitude control and Gene instinctively grabbed his large elevator trim wheel and began rotating it forward … with great success. While Andy maintained directional control by aileron and a pinch of rudder, Gene was able to control pitch attitude with elevator trim; while one flight engineer assisted by adjusting engine power settings, the other F/E disappeared into the hell-hole below and physically disconnected the autopilot control module from the aircraft's flight control system … no change. So far so good, but without any previous record and without an established procedure relating to their condition, this crew's common future was still flying toward a big unknown. Fearing they might also experience a similar loss of aileron control, Captain Andy issued the "dinghy-dinghy" directive to his crew while cautiously turning toward land … accompanied by a blind *Mayday* transmission on VHF and an *SOS* message to Maritime Command Operations on HF.

Getting themselves over terra firma as soon as possible was an obvious priority: even a smooth and successful ditching could inflict considerable pain and discomfort … fire-retardant flying suits were not designed for chilly-dipping in the big pond. If necessary, abandoning ship over land was the preferred option; and as such, that day's *coast-crossing inbound* checklist included the donning of parachute harness … just in case. Their closest airport and foremost destination, CYZX Greenwood, soon proved undesirable because of strong-gusty crosswinds; similarly, their home base at CYSU Summerside was also advertising an ornery wind blowing between the runways. With its long runway and appropriate wind, CYCH Chatham quickly became the destination of choice for an envisioned flapless landing in a large airplane with significant flight control issues. Notably, the elevator trim wheel on the Argus aircraft did not directly control the elevator trim tab; instead, it merely adjusted a small control tab that encouraged its larger trim tab to aerodynamically influence their much larger free-floating control surface. While the trim change associated with lowering of the undercarriage was a necessary risk; the risk demanded by extension of trailing-edge wing flaps would be wholly undesirable. Meantime, old 712 was temporarily edged up to 12,000' in order to remain clear of cloud and associated turbulence while maintaining a visual horizon for attitude reference. Closer in, Chatham GCA (Ground Controlled Approach) provided radar assistance into the slot before leaving them to their own devices on their abnormally flat-and-fast approach profile: "Happy landings, Swordfish!"

It was indeed a happy landing. A smoothly flown approach with delicate handling by the cockpit crew led to a silky soft landing by Andy … directly into a light wind on CFB Chatham's longest runway. Well done, Andy! Well done, Gene! And of course, sincere appreciation goes to the very adept flight-engineer throttle-jockeys whose names seldom made it into our log books. Other Argus pilots who were present to witness that arrival of Crew 5 in 712 were unanimous in our appreciation: for many of us, smooth landings in the Argus were rare events at the best of times, even with a fully functioning airplane. Although it was probably just one more greaser among his many, Andy would always remember this flapless, elevator-less landing on November 04, 1966. For his entire crew, it was a big breath of relief after a seemingly long and overly intense day. For aircraft operators and manufacturers everywhere, particularly for the RCAF and Canadair at home, it was a game-winning save—calamity and catastrophe were held at bay. For most everyone in the aviation community, that landing was a beautiful exclamation mark—an appropriate ending to a brilliant display of airmanship.

All was not finished yet, however. Immediately after touchdown, Gene had the foresight to rotate the elevator trim wheel fully forward to thwart any uninvited nose-up tendencies during roll-out. Lo and behold! In the process, the erstwhile immovable control column was suddenly free, moving easily in both the fore and aft directions, feeling just like a normal control pole should. Gadzooks! What do we say now? Soon after engine shut-down, an airframe maintenance technician clambered into the cockpit to investigate … "yup, it moves just like it should." After considerable time at the task and innumerable cycles of the control column, the techie finally felt it become jammed-solid and unmoveable in the fore and aft plane … "yup, it's stuck just like they said it was." Thusly began a comprehensive and surprisingly brief investigation into cause of the problem—a poorly lubricated gear box, connecting elevator push rods in the tail assembly, was identified as the culprit. Soon after we had shuttled the happy survivors back home to Summerside, a replacement gear box arrived at Chatham to be installed in 712 which was back on active duty several days later. For many people, 04Nov66 was just another day at the office. We in Crew 3 had been pilot training with this same aircraft five days prior, and we would be chasing submarines around Bermuda with it ten days hence.

Subsequent logbook endorsements and letters from his squadron commander (W/C Pierpoint) and from his base commander (G/C Berry) commend F/L Normand "… for his excellent display of airmanship under hazardous conditions. His skill and decisiveness were instrumental in averting a major disaster and are indicative of the highest degree of professionalism."

Fifty years after the fact, Andy remains grateful to his crewmates and to all the people on the ground who helped resolve an extremely awkward situation. Simultaneously, he feels somewhat bemused by an apparent lack of follow-up action: denied direct access to pertinent maintenance information at the time, he had to accept the party line handed down the chain of command—one gear box on one airplane had missed being lubricated on one routine inspection. Otherwise, all was then considered to be well in the world of Argus. Today, there remains but scant reference to this 712 anomaly. When queried, the Canadian Forces Department of Flight Safety advised …

DFS only recorded *accidents* in our database before 1967; the occurrence you mention below was classified as an *incident* therefore we have no record of a flight safety report. However, after looking through Flight Comment magazine archives around the subject time, we noted an article on the aircrew receiving a Good Show award for their efforts.

Good Show indeed! Yes, the summer of '67 edition of *Flight Comment* magazine does include a brief summary of the incident along with a photograph of Andy and Gene. Presumably, in the interest of flight safety, a mini-report is better than no report. However, when reading this cursory salute to sound airmanship, it is difficult not to think about Argus #20727 that had disappeared with its entire crew the previous year while conducting torpedo trials off the coast of Puerto Rico—flying at night and at similar altitude. We'll probably never know what happened there.

For, as Andy Normand calmly states: "If 712 had pitched down instead of up, we wouldn't have this story to tell."

Footnotes and Postscripts

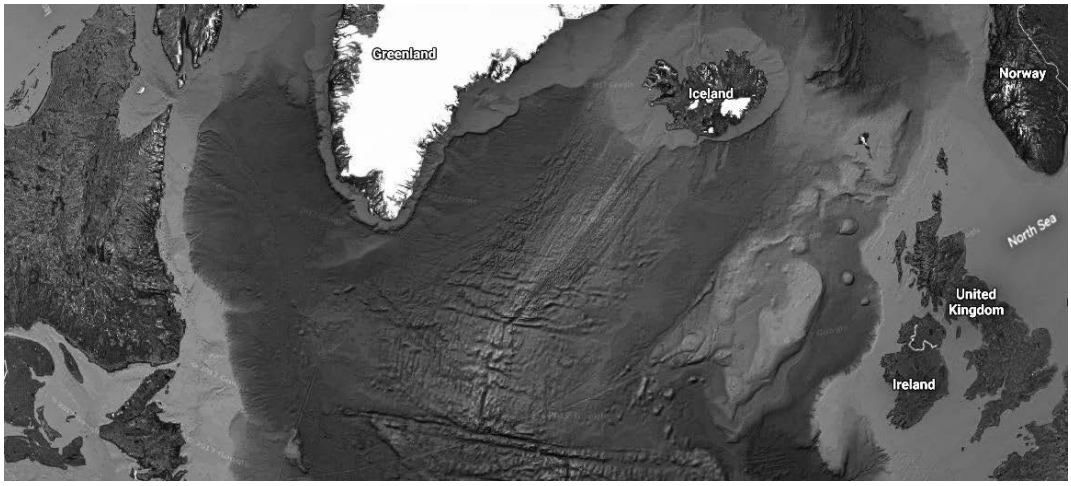
1. **Andy Normand** joined Air Canada in 1967 where he served for a time as Chief Pilot DC-9 before retiring in 1998 and now living in Ottawa

2. **Gene (Jean) Roy**, now deceased, had retired from the air force to live in Bathurst NB.

3. **Argus 712** remains on display while guarding the gate at Comox Air Force Museum.

8

The North Atlantic



After operating for six months as a Second Officer followed by six months as a First Officer on the Argus aircraft of 415 Squadron, an October ’66 shuffling of the deck in A Flight dealt me to Crew 3 captained by Les Shumka. During an immediate set of Lajes-loop patrols and subsequent exercises in Bermuda and Puerto Rico, this First Officer assignment proved to be a great fit for me. Under Captain Shumka’s direction, Crew 3 excelled at its duties while patrolling all parts of the North Atlantic, from European capitals to islands in the Caribbean. A two-week set of *Landlubber* patrols out of Patuxent River Naval Air Station in Maryland (KNHK) preceded operations at Navy Norfolk in Virginia (KNGU) and Navy Brunswick in Maine (KNHZ). It was during these international exercises that I first came to grasp the enormity of the American military machine … and the vast quantities of machinery within it. To a newbie from the north, the US Navy seemed obviously well positioned to defend that country from the threat of hostile submarines: the size of these American bases and the amounts of equipment on hand seemed staggering. Our squadron’s solitary maintenance hangar and our eight airplanes would barely leave a mark on any one of their ground facility charts.

During six months as First Officer on Crew 3, I also learned a lot about our Canadian role in the bigger picture and about how a well-functioning flight crew helps make it happen. Whether pilot training at home or schmoozing with the U.S. Navy in Newfoundland, our captain inspired crew spirit and prompted professionalism while sharing his considerable knowledge with enthusiasm and good humour. Captain Shumka was an Argus mentor and a people teacher for many of us. Thank you Les.

Six months after joining Crew 3, another shuffling of the deck in May of ’67 dealt me to Crew 2, captained by Wayne Griffith. Although rationale for the change was not immediately obvious, the density of our flying schedule certainly was: during my first ten days on Crew 2, we flew three 16-hour patrols and paid another visit to Navy Brunswick in Maine as well as making an air show appearance at Goose Bay on the Labrador mainland. The next ten days were taken care of by deployment to Keflavik, Iceland (BIKF) for six more patrols to observe and monitor (spy and harass?) the Russian naval fleet which was conducting exercises in the northeastern Atlantic.

"Life at Kef" was a term open to interpretation: Were we housed and provisioned? Yes. Was it fun? No. Reminiscent of our accommodations at Rosy Roads in Puerto Rico, we were again housed together (literally) with two rows of sleeping cots in a barrack block adjacent to noisy runways. However, instead of listening to F-4 Phantoms in after-burner, we were now entertained by the 24-hour service provided by several trans-Atlantic air carriers and numerous airborne military units; instead of creaky wooden floors and unconditioned tropical heat, we now had solid concrete floors and barely heated semi-polar air. Long, dark southern nights had been replaced by almost 24 hours of grey-light; and a cacophony of strange tunes emanating from the jungle had given way to the sounds of "friendly" rocks being lobbed onto our tin roof. We were living in a *Quonset* hut.

Originating with the U.S. Navy at Quonset Point, Rhode Island, this WWII-inspired utilitarian and transportable structure has served a multitude of causes in a multitude of places during war and peace. After 1941, it would have been nigh on impossible for the U.S. Military to establish a base anywhere without installing a requisite number of these 20x48-foot half-culverts of corrugated galvanized steel that each offered 700 square-feet of floor space and 10-foot ceilings. While reported to be admirably functional in certain circumstances, they proved barely adequate for weary airmen seeking rest between tightly scheduled missions over the North Atlantic Ocean. At 64 degrees north latitude, Quonsets were arguably better than tents; however, if snow had been present on the barren landscape of southwest Iceland, igloos may have been more inviting. Constant crew movements and relentless light made sleep a rare commodity within our thin-tinny silos; our 18-hour on/off duty cycles ensured that any distracting events at the Officers' Club were necessarily brief, however warm and comfortable they seemed.

Once airborne, life seemed more familiar if not more comfortable. Assigned to defined blocks of airspace and seascape in the vicinity of the Iceland-Faroes Gap, our 18-hour patrols were mostly passive in nature—flown at higher altitudes with radar off—while monitoring well-positioned sonobuoys listening for engine noise from submarines taking part in a large tactical exercise being conducted by the Russian Navy out of Murmansk. Together with fellow crews and sister squadrons, we operated in conjunction with similar air force or navy contingents from our allied countries. This was NATO doing its thing in the North Atlantic Ocean. While most European partners operated from bases close to home, we Canadian Maritimers worked in close harmony with our American hosts at Naval Air Station Keflavik. For ten days the sky was filled with *Neptunes, Shackletons, Orions, and Argii* while ships of all sizes and shapes plied the waves. Whatever went on underwater was known only by a select few; and although we saw much of the ocean, we knew little of what it contained beneath the waves.

As the longest-range airplane with the most gadgets and eyeballs, the RCAF Argus was normally assigned to relatively large patrol areas relatively far from shore: it was not unusual for us to be monitoring exercise extremities far abeam the south coast of Ireland. Orbiting slowly around our area to conserve fuel while revisiting our listening-post sonobuoys, our detection equipment operators would be attentive to ECM (Electronic Counter Measures) looking for radar transmissions or transponder interrogations from unseen sources, and be carefully scanning Jezebel print-outs for any submarine engine signatures being transmitted from our submersed hydrophones. While the pilots up front fought to remain awake, the geniuses in the back dissected and analysed data which only they could understand. With knowledge of the signature spectrum, they could identify the class (genre) of submarines as well as distinguish between engine noise (vibration) and propeller noise (cavitation); similarly, they could tell when a diesel-electric submarine came up for air and was "snorting" at periscope depth—charging its batteries with the engine running. If any target of interest was discovered, our tactical coordinator and our electronics specialists would passively refine its position, by triangulation of sonobuoy traces and strength, in hopes of catching it at the surface and running in with radar for photographs … "Tacco from Jez, he's beginning to snort!"

Yeehaw! Anticipating my first look at a real enemy submarine, throttles were retarded and we drifted purposely downward, well hidden by layers of cloud. By now, our target's position had been further localized to a small patch of ocean travelling in a known direction at an estimated speed. *Action stations everyone ... cameras ready ... radar on standby.* Knowing our target is watching for radar pulses as well as listening for engine sounds, we plan our approach into wind without flashing-up our radar until the last minute; then, after fixing his position with several "paints of his pipes," we will run-in visually for a surprise photo-op … so far so good … sliding softly through a broken layer of sea stratus … *radar ON ...* "yup, there he is, 12 o'clock at 4 miles" … *radar OFF...* WHOA!

Dead ahead and coming our way is another airplane obviously homing-in on the same target from the opposite direction. Gadzooks! If the cloud base had been much lower, the two of us might have collided head-on overhead that *Zulu-class* boat before it pulled its pipes and disappeared. Instead, we simply acknowledged our good fortune by executing an airshow turn at maximum torque to pull alongside the interloper, a P2V7 Neptune from the Royal Netherlands Navy, upon which we bestowed a friendly multi-fingered salute. The Dutchmen must have strayed in from an adjacent patrol block. Canadian navigators always know where they are—although where they are going is sometimes a different matter.

Routine Navigator – forward

looking aft

Tactical Navigator – aft

Years before advent of the more reliable Omega Navigation System (ONS) and decades before introduction of the Global Positioning System (GPS) and Satellite Navigation systems (SATNAV), our navigators were masters of the mediocre, getting by with less accurate Loran and intermittent celestial to update onboard positional platforms. Far beyond coastline radar fixes and shore-based navigation aids, they perfected the art of compromise in a challenging environment of severe winds and significant turbulence. Without regular updates of our geographical position, the magic spring-loaded, inertia-motivated, Doppler-guided position marker on the tactical plot would lapse into relative irrelevance: although we might have some idea of our position within the operating area, we might not be certain of the displayed operating area being where it is supposed to be on the surface of our planet. If our Loran receiver failed under an overcast sky that prevented celestial observations, the uncertainty of our position could lead to further issues.

On one such occasion over the central North Atlantic, a Loran failure under overcast skies had created some uncertainty about the proper (exact) direction for proceeding off task. Of course, we would bump into land by simply heading west; however, professionalism notwithstanding, a more refined heading along with time and distance calculations would greatly enhance transition from our operational patrol zone into controlled domestic airspace and to the communications that go with it. Aha! Revitalizing old memories from student-pilot days, the Argus drivers on this gray-windy day employed the old *one-in-sixty* rule by tuning in a strong commercial radio station and turning their aircraft until the ADF needle was pointing toward their wingtip. Despite the high probability of encountering skip waves across their hundreds of miles of distance, the received signal seemed satisfactory and the magic formula was applied—the number of seconds required for a 10-degree bearing change was divided by 10 and voila! We now knew the number of minutes required to reach the tuned radio station. Informing our navigators of the time-enroute ETE and advising operations of our arrival-time ETA, we put the needle on the nose and headed directly toward St. John's, Newfoundland. Lo and behold, we arrived overhead within two minutes of our estimate, well within limits for any domestic IFR flight plan and truly amazing for a long-range flight coming out of nowhere. In usual fashion, any residual pilot smugness was pounded into oblivion by the abrupt nature of our "landing" back in Summerside.

415 Sqn. aircraft are identified by red propeller hubs and a red swordfish on the tail

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Centennial Year

After our ten-day deployment in Keflavik during May of '67, Crew 2 returned to Summerside where big changes were taking place in squadron administration. My previous crew captain was suddenly no longer a Flight Lieutenant: he was now Squadron Leader Les Shumka on his way to middle management. Simultaneously, the flight commander of A Flight, S/L Ira Creelman, moved across the hall into head office at squadron operations to be replaced by our new flight commander, S/L Al Fox. Six days into the month of June, one of S/L Shumka's first assignments was a pre-captain evaluation check ride for First Officer Rowlands. Yes, it was a surprise. Although long recognized as a future possibility, the reality of my becoming a Crew Captain had never reached discussion or planning stages. Suddenly, however, there seemed some rationale for my recent transfer from Shumka's Crew 3.

So, there we were, taxiing away from the hangar with a full load of fuel and a full crew complement on Argus 737 with four engines running: we were heading out on a multi-day Loop patrol to Lajes and back with the young would-be captain in the front-left seat and his senior evaluating officer nowhere to be seen. Reaching the holding bay adjacent to the departure runway, aircraft parking brakes were applied in preparation for the flight engineer's comprehensive engine "run-up" performance check, whereupon a panting and gasping voice came on the intercom, "Pilot from Ground Man … pant, gasp … can I disconnect my headset now?"

We didn't need intercom to record my own immediate gasp or to collect the communal laughter that rippled through our crew. Obviously, the additional stripe on Les Shumka's uniform had not covered up his sense of humour which had invented a "worst case" scenario from his aft look-out position. Presumably, colour returned to my ashen face as the bristles on the back of my neck subsided. In novel fashion, our mentor had broken the ice, consciously or otherwise, and removed much of the mission pressure: from then onward, it was just another pair of 16-hour patrols.

On June 21st, a successful 12-hour patrol in Argus 712 with S/L "Slim" Creelman served as my official Captain's check-ride. By Canada Day 1967, Crew 3 had a new Captain, one with a new Flight Lieutenant's stripe on his uniform … and a slight raise in pay.

For reasons known only to MARCOM headquarters in Halifax, the Russian submarine threat all but disappeared during our centennial summer: Crew 3 flew but one patrol in the month of July. Instead, we escorted HRH Queen Elizabeth II across the Gulf of St. Lawrence in case she ran out of gas on her way to Expo '67 in Montreal. Then we began "waving the flag" with fly-by airshows over the PEI communities of Morrel, Kensington, and Alberton. There might be no better way to celebrate a twenty-third birthday than doing a two-plane formation fly-past over downtown Summerside with buddy Uruski, another new crew captain. Could it get any better?

Yes, it did. For whatever reason, perhaps the absence of long-range patrols, Crew 3 was instructed to put some time on an airframe (burn some gas) by conducting a pilot/crew training exercise entirely of its own choosing. With subtle encouragement from their captain, the crew elected to do a cross-country flight westward over Ontario for necessary airways familiarization and for an unofficial opportunity to visually revisit the hometowns of some crewmembers onboard. Sharing cockpit duties were two first officers: RCAF Flying Officer Andy Lussier and Lieutenant Sean Carrigan of the Royal Canadian Navy who was on exchange, seeing how the other half lives while getting a break from flying Trackers. Off we went in good-old 712 again, taking turns doing instrument approaches at any airport close to anyone's hometown and doing some sightseeing in the neighbourhood. Crew Navs and ROs took most of the day off, notwithstanding their waiting list to occupy the nose-cone bubble during low-level events. As luck would have it, after looks at CYYZ Toronto and CYXU London, it was the captain's turn to do an NDB approach and go-around at CYGD Goderich before continuing with the cockpit rotation through CYVV Wiarton with a look at Owen Sound. From there, an approach into CYQA Muskoka gave us Gravenhurst and Bracebridge on the way to CYOW Ottawa and CYND Gatineau before arriving home at CYSU with 10:00 in the log. Great fun!

My feet quickly returned to earth next day when a senior officer directed me into his office to discuss grass stains on the propellers of 712. Gasp! … Goderich was the only grass strip we visited, and it did have a crop of hay in the infield … Oh yes, with a warm chuckle and a broad smile, Les Shumka had rattled my chain once more.

During the previous 12 months, country farm houses had become home to many of us. As trail blazers in an arduous process which finally allowed unmarried officers to reside off-base, Uruski, Bradbury, and Rowlands had originally taken up residence at *Merrywood*, a small rental near the head of Darnley Basin on the island's north shore. By the summer of '67, we were comfortably re-established in a larger farm house farther down the inlet at the end of a long lane off Malpeque Road and closer to Cabot Beach; recently abandoned in favour of a more accessible home on the main road, the Lockhart family's ancestral homestead was a well-worn old gem renting out for the grand sum of $40 per month (plus utilities) and free access to the vegetable garden. In keeping with our lifestyles, imagined or otherwise, we named our home *Beehaven.* From its front porch overlooking the basin, it was a short walk down to the small dock where Captain Ron Uruski moored his boat, a 17-foot burgundy-coloured runabout with a deep-V hull and a big-black 95-hp Mercury engine on the back. She was *Miss Beehaven.*

With the cost of playing golf soaring beyond $2.50 per round at Cavendish, and with "hordes" of tourists crowding the beaches, we became seriously addicted to water skiing at high speed on the calm waters of Darnley Basin whenever the opportunity presented itself … daylight hours only. While rehydrating and debriefing after a particularly busy day on the basin, one of the participants —most likely "Captain Crash" Uruski—light-heartedly suggested doing a water-ski trip up the St. Lawrence River to Expo '67 at Montreal as an appropriate Centennial project. In a surprisingly short period of time, silence gave way to hilarity that soon subsided into serious planning.

Meantime, there were search and rescue missions, air tests, and several long-range patrols to be flown. For Crew 3, a Loop through Lajes to RAF St. Mawgan was particularly enjoyable because a shortage of accommodation at that RAF base forced us into a charming seaside hotel in the Cornish resort town of Newquay. (Oh, how we suffered.)

Soon after our arrival back home, Captain Crash and Crew 5 returned from doing the annual Abbotsford Airshow in BC … with souvenirs: during a lull in the action, Ron had motored into Vancouver with his "smuggled" motor bike and brought back a much-needed heavier-duty pair of water skis for our impending adventure. Last minute preparations included installation of a long-range fuel tank—from the car dump—under the bow deck of Miss Beehaven along with some valves and simple plumbing connecting it to the primary fuel system at the aft end. When third musketeer Bradbury was suddenly and immediately assigned to his awaited course at #2 (M) OTU, our Centennial Project was saved from last-minute cancellation by our friend Sharon Clark who volunteered for the mission.

One foot on the dock and one foot in a ski … hit it!

Footnotes and Postscripts

1. ***The Skidiots of Expo 67*** recounts the story of our Centennial Project in a later chapter.

2. **Wilf Bradbury and Ron Uruski,** my bug-smashing buddies and house-mates from Beehaven, remained on the radar. Wilf followed his RCAF career with a secondary career at Transport Canada, mostly as an airways inspector and pilot examiner. Ron followed his RCAF career with a typically on-edge experience—flying C-130 *Hercules* transports out of Angola in Africa—before his final flight west in 2015.

3. **Les Shumka,** our respected Argus mentor, went on to become Chief Pilot of the BC Government's air service that operated Cessna *Citation* "bizjets" for Medical Evacuations and parliamentary shuttles. Having each recognized the other voice while communicating with ATC in BC District circa 1977, we later reconnected on the ski hill at Whistler.

10

On Task

After surviving an intensive two-week lesson in big river dynamics during our Expo ’67 water-skiing adventure, we were back on task with aerodynamics at 415 Squadron in early September. With Squadron Commander Joe Pierpoint at the helm, Crew 3 started the month with a “jam trip” to Copenhagen, Denmark (EKVL) for an exchange visit of like-minded NATO members … or some such obscure purpose known only to the boss. Rumour suggests that the pull-up from our flag-waving low-pass on arrival at Copenhagen was overly aggressive, pulling sufficient g-force to pop our fuel dump chutes out of their lower-wing housings … faulty fasteners, no doubt. As pilot in command, W/C Pierpoint accepted full responsibility for any inconvenience caused by our minor mechanical failure while encouraging his wild colonial boys to fully enjoy the old city.

By the end of 1967, with slightly more than two years on squadron, my log book had recorded eighty-five (85) Patrol missions with upwards of ten hours flying time in each; the many direct transit flights and the numerous, but shorter, annual training missions such as *Subex* and *Torpex* are not included in this tally. Those long-range, open ocean patrols were our bread and butter, our *raison d’être*, for which we had been well-trained and well-conditioned. The fact that we helped track infinitely more friendly surface vessels than enemy submarines was simply the task at hand. The fact that we occasionally contributed to search and rescue efforts made the job even more rewarding. Although some floating oil drums and some rafts of driftwood began to look eerily familiar, it was still a big ocean out there; and although all open-ocean patrols were similar in their context, some are not easy to forget.

On the morning of January 7th, 1968, Crew 3 briefed for a patrol in the mid-Atlantic. Although mission details have long-since disappeared from memory, some circumstances remain indelible: the assigned patrol area was technically closer to Ballykelly in Ireland than to Summerside; the patrol-area sea state was reported to be very high; a low-pressure weather system was steaming up the coast from Cape Hatteras; another low-pressure weather system was storming down the valley of the St. Lawrence. Although singularly or in combination, these were not unusual conditions for any operation in our area of responsibility, their alignment on this day paints a colourful backdrop to the action. Although we would not have chosen to spend our entire day bouncing aimlessly around a patch of grey-green ocean, we had a job to do; the fact that winds of 40-50 knots were whipping up a frenzy of white caps out there was not unusual; the fact that our radar would be next to useless in sea-return clutter from closely spaced 20-foot waves was irrelevant; the fact that our home-base airfield would most probably be unusable for landing on our return was luck of the draw. We had a duty to perform.

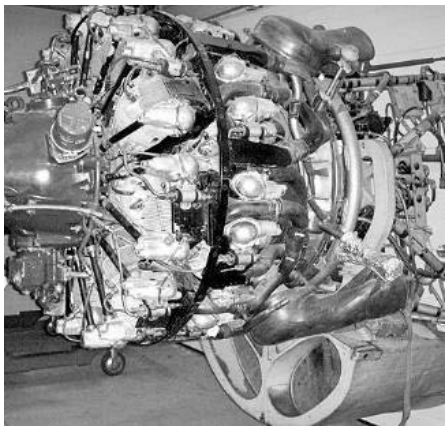
Immediately after take-off in Argus 737, another not-so-rare factor came into play. A warning light and other indications on the engineer's panel announced failure of the CSD (Constant Speed Drive) for one of our four engine-driven electrical generators. Although the loss of one 40-kva generator was not itself a problem—even with our extremely high electrical demands, we could function with three—there were other overriding concerns. Without a CSD disconnect mechanism—which later became standard equipment—there was fear of a sheared drive shaft thrashing around among sensitive engine components such as oil pumps and fuel lines. Rather than risk further damage to a complex power plant that was inhaling 115/145, the highest-octane gasoline available, the Abnormal Procedures Checklist required the affected engine to be immediately feathered and taken out of service. After dumping 24,000 pounds of fuel (3,500 gallons) to achieve maximum allowable landing weight, we returned to base and taxied back to the maintenance hangar.

Once the engine techs had popped the cowlings and started twisting wrenches, a visit to the squadron operations office seemed appropriate. Given the current mechanical delay and the impending weather, the idea of scrubbing a useless mission seemed sensible; after all, even if a submarine was dumb enough to surface in those sea conditions, we probably wouldn't be able to see it; and if a surface vessel got into trouble and sent an SOS, we might be able to confirm its position and take a picture … but that's about it. The senior ops officer was not interested in discussing any such nonsense: "You've got your orders—now carry them out." Memory suggests a second mechanical failure on the subsequent departure motivated another visit to the ops office; however, the logbook annotation *"Ridiculous!"* beside my duty entry is emphatically short of details. In any event, personal recollection does suggest an increase in temperature levels under two collars and a decrease in mutual understanding for two points of view. The top-down bottom line was clear: "Carry out your assignment and get out there as fast as you can!"

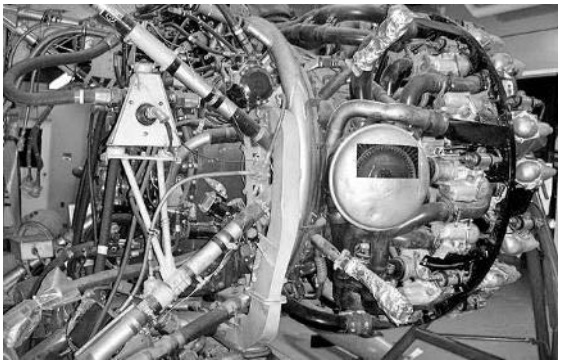
My "yes, sir" response was part of the job, but my whole heart was no longer in the mission. For naïve young men, it might be perfectly fine to consume gallons of fuel while waving the flag at local airshows, but it's something entirely different to burn it up while boring useless holes in the sky miles from home in marginal weather. How come only naïve young pilots seemed to know the airport was going to be snowed under by day's end? Nevertheless, about midday, six hours later than scheduled departure time, we were parked beside the departure runway for another engine run-up, listening to the latest weather reports while watching the ceiling come down in swirling snowflakes. The ceiling and visibility were almost down to minimum allowable limits for take-off, and any further slight delay could cause cancellation of the mission. Easy now … take a breath and have another look around. The other airplane now parked beside us contained another young pilot with keen interest in local weather. Ron Uruski and Crew 5 were on their way to Lajes and they wanted us out of the way before the weather went below limits. Nothing was said. The situation was obvious, as were the options and ramifications. For naïve young men, it's one thing to use an operational technicality to out-manoeuvre a senior officer; it's something else again to allow a bit of weather to get in the way of a friend's duty-free shopping mission. "Brakes released … max wet power, if you please, Mr. Engineer."

Successfully airborne without a CSD failure, and with my senior officer's parting instructions ringing in my ears, METO power was the natural selection for getting us out to the patrol area as quickly as possible. Somewhat less than Climb power and somewhat more than normal Cruise power, Maximum Except Take-Off was the highest R3350 power setting recommended for continuous operation—somewhere around 2400 rpm and a fist-full of manifold pressure—giving us a significantly noisier ride while pushing our cruise speed beyond 200 knots. Our significantly higher fuel consumption was another matter: getting out there was one thing; getting back was another. While our getting back was never in serious doubt, the question of where we might get back to had been on our minds before our very first take-off many hours ago. The subject now required more serious attention. Summerside was below take-off limits by the time we reached cruise altitude on the way out; it was below landing limits before we reached Newfoundland, and all airports on the east coast appeared to be following suit. There was a big-hummer of a snow storm beginning, and it would last for at least 12 hours. By the time there was enough snow to scramble the plows, the rate of accumulation would be difficult to keep ahead of. Experience suggested that most, if not all airports in Atlantic Canada would be closed for about 24 hours.

Common sense and conscientious research soon established RCAF St. Hubert (CYHU), near Montreal, as our closest safe-bet military airport for landing some twelve hours hence; nearby RCAF Ottawa (CYOW) at Uplands was a natural alternate. As such, the remainder of this mission would operate in accordance with this unofficial flight plan: our available time on task in the patrol area would be determined by the amount of fuel required to reach St. Hubert while carrying an Ottawa alternate plus the mandatory 45 minutes of reserve fuel. Although our high-speed power setting would swallow a big chunk of our fuel load, we would reach our assigned patrol area in the fastest possible manner … which we did. Upon entering the zone, and in adherence to duty regulations, our radio operator tapped out the requisite Morse-code message to MARCOM HQ on HF at upwards of 20-words-per-minute and properly encrypted in the NATO Secret code of the day. We were now *On Task.*



A display-stand view of the Wright R3350 Duplex Cyclone (TC18EA1), the air-cooled twin-row 18-cylinder supercharged engine powering the CP-107 Argus. With water injection and three exhaust-system PRTs, it produces 3,700 static horse-power (about one per pound of weight) while measuring 76″ in length and 55″in diameter. First developed in the 1930s for Boeing's B-29 Superfortress followed by the Lockheed Constellation and Douglas DC-7. Later versions included a CSD disconnect mechanism to protect these vital components on the backside of the crankcase.



11
Off Task

It wasn't easy. Mechanical delays had compromised the beginning of our mission and the need for speed had increased our fuel consumption while weather issues challenged its completion. Professional airmanship had demanded inflight revision of our internal flight plan with a necessary change to the designated destination airport. As such, immediately after reporting on task, the amount of fuel remaining in our tanks demanded a 180-degree turn toward CYHU St. Hubert. Upon leaving the patrol area, and in adherence to duty regulations, our radio operator tapped out the requisite Morse-code message to MARCOM HQ on HF at upwards of 20-words-per-minute and properly encrypted in the NATO Secret code of the day. We were now *Off Task.*

Although we had fulfilled our duty by getting there, our time on task was limited to that required to complete one half of a rate-one turn. Although yet to be seen in the book of Guinness, our one-minute on task might be a world record for the shortest ever flown by a maritime patrol aircraft. No questions were asked via NATO Secret code as we lumbered back toward land at a much slower speed than we went out. Once in VHF range, weather reports were blandly interesting with most stations south of Newfy Rock showing ceilings and visibilities hovering close to zero-zero in moderate to heavy snow. When contacted soon after we passed the Maggies (Iles de la Madeleine), the fresh duty crew in Squadron Ops gave no hint of anything abnormal. As always, the terminal forecast suggested the possibility of occasional improvement to landing limits sometime during the 12-hour valid period, and GCA was available … bearing in mind that a 100-foot ceiling with an eighth of a mile visibility isn't too far below legal limits of 200 hundred and a half is it? Close but no cigar. With 40 knots of snow blowing across the runway at 40 degrees off centerline, legal limits aren't always safe limits—especially with our paltry 17-knot crosswind capability—and a very few hours of such conditions can adversely influence runway conditions [understatement]. While awaiting response from Squadron Ops to our request for a look out the window and for the latest runway reports, it was impossible not to ruminate on the old classic … *It's a helluva war, but we haven't lost a desk yet.*

"Sorry guys," came the response, "we've just been informed that the airport is closed … suggest you go to Greenwood."

"Roger copy. The weather's ugly over there as well. Can you get us their latest runway report? You might as well get Shearwater while you're at it."

"Roger wilco, standby …" Two minutes of silence.

"Sorry guys, Greenwood and Shearwater are also both closed … so is Halifax."

"Roger copy thanks, we're in a right turn to St. Hubert."

That's all there was to it. There was no point burning any more gas in that direction, and weather notwithstanding, there was no interest in trying to put our strange airplane into a non-military airport lacking in appropriate maintenance facilities and crew accommodations. Hell no! We had NATO-sensitive classified equipment on board as well as guys who knew Morse code. We had barely passed by Moncton NB (also closed) when a message from ops "advised" us to proceed to Ottawa instead of St. Hubert. Although it was unclear where that directive had come from—the scrambled resources and last-minute machinations among command centres can only be imagined—we knew someone senior to us wanted us in Ottawa. No sweat: the fuel required didn't change and the mainline base at CYOW had advantages over CYHU which, though closer to our off-task point, was more of a reserve-squadron satellite field shared with industry and commerce, much like Downsview-Toronto. On the other hand, RCAF Uplands was a major presence at Ottawa International Airport with numerous hangars and numerous aviation units including the MP&EU (Maritime Proving and Evaluation Unit) which had considerable hands-on experience with the Argus. Somebody was thinking … maybe.

Twenty-two hours after that morning's alarm clock had sounded, twenty hours after initial mission briefing, and fourteen hours after the day's final take-off, Argus 737 and Crew 3 taxied onto the air force ramp at Ottawa Uplands. Unfortunately, there was no available hangar space for our unexpected bird; an outside air temperature of –20C may have had something to do with the full hangars. Furthermore, (further-less?) there was no room at the inn for us unexpected human visitors who had arrived without reservations; a locally based conference and/or military exercise had filled all available rooms on the base, and after all, it was very late on a Sunday night. A bus ride deposited us at a suburban motel, clad in our flying suits and carrying the few contingency items we thought to bring. (Routine Orders "advised" the carriage of toiletries and alternate clothing always; however, complacency was also a common companion.) Yes, it had been a long 24-hour day. No, we couldn't find a beer anywhere.

Monday the 8th was a day of "rest" with numerous telephone calls to and from Squadron Ops in Summerside; the weekend was over, the airport was closed, and everyone wanted to know where we were. Mostly we were hanging out at the Ottawa motel; with day-time air temperature slowly warming from an overnight low of –30C, there was little incentive for outdoor exploration of our nation's capital city. Out at Uplands Airport, Argus 737 was standing in purple pools of hydraulic fluid on the visitors parking apron: her brake seals had contracted in unaccustomed frigid conditions. Fortunately, she soon returned to her normal self when towed into newly available hangar space and topped up with warm fluids.

Tuesday the 9th was another day on the job. Being assured the airport would be usable in time for our arrival, we were instructed to conduct a 10-hour crew training exercise on a self-designed route to home base. No problem: we would check out Sudbury and North Bay with practice IFR approaches before arcing across central Quebec with a refresher course in elementary techniques for our routine navigators. We didn't get very far. Soon after reaching initial cruise altitude, our #2 engine began leaking oil at a great rate, so much so we were compelled to feather it—turn off the gas and angle its propeller blades into the wind to stop rotation and reduce drag. Unfortunately, despite all efforts tried and true, #2 engine refused to feather … it just kept leaking oil and spinning its propeller. Our immediate concern, of course, was the undesirable scenario created by an internal combustion engine that continues to run after running out of oil.

An engine fire is never nice. On a wing-full of 115/145 Avgas, it wouldn't be pretty. *Time was indeed of the essence.* After very brief consideration, we rejected the flight engineer's idea of a volunteer mission to the "hell-hole" electronics bay for manual exchange of current-limiter thingamajigs in hopes of restoring electrical power to the propeller of our troubled engine. Not knowing what was happening at the propeller and not wanting to risk further complications to other electrically dependant systems, we declared an emergency and told our troubles to ATC while reversing course back toward CYOW. Under the circumstances, an immediate over-weight landing was deemed better risk than taking time and risk to dump surplus fuel. The landing was a piece of cake. The ensuing paperwork was not.

Wednesday the 10th was another day on the job. By late afternoon, 737's oil problem had been diagnosed and rectified, and our flight commander had arrived on another aircraft from Summerside to see us home. Obviously, our home airport was again open for business; not so obvious was the reason for S/L Fox coming to escort us home. Crew rest didn't seem a concern: he had me doing the flying from the left seat while he did the radio work and monitored from the right. Although destination weather was comfortably above limits, the night-time non-precision NDB approach to runway 06 brought surprise and excitement. We hadn't expected to see two rows of white lights in a vast field of white without seeing a dark strip of semi-cleared runway in between. Obviously, there were no missions scheduled until next day; and braking action would be an unknown factor somewhere near bottom of the spectrum. POOF! ROAR! Immediately on splash-down, four engines went into max-reverse and at least two human feet held brake pedals firmly depressed. OOPS! Copious quantities of severely agitated snow crystals enveloped all cockpit windows in a white cloud that eliminated all forward visibility. With feet still hard on the brakes, the throttles were moved toward idle. OOPS! When the white dust settled and visibility returned, the best view of the runway was out the pilot's left side window. Applying extra emphasis to engine #1 and #2, all four were enthusiastically reenergized into reverse until visibility again disappeared in a white cloud of snow. With feet still hard on the brakes, the throttles were again moved toward idle. OOPS! When visibility returned, we were slightly cocked the other side of centre-line. Applying slight emphasis to engine #3 and #4, all four were cautiously reenergized into reverse. With less forward speed and less agitation, the snow crystals were better behaved. After sliding to a halt near the runway's end, we taxied directly into the nearby ready hangar and called it a day. That was enough of that.

Thursday the 11th was another day on the job. This one began "on the carpet" of the flight commander's office with flight plans and fuel logs in analysis of the world's shortest-ever maritime patrol. Of course, none of the senior officers there present were happy about what had happened; however, hearing our story and seeing the numbers, they had no argument with our actions. Case dismissed. That was the end of that.

Friday the 12th was another day on the job and Crew 3 was back on task with a 17-hour patrol over increasingly familiar-looking waters. From subsequent attempts to understand the rationale behind our recent pressurized dispatch into marginal conditions (and its ensuing financial and logistical costs) arose the subjects of "operational necessity" and "flying the graph" that invited more serious contemplation. While the former had always seemed a self-explanatory term with a wide range of interpretation, the latter was a new intrusion into my comfortable world of naivety. Whatever it may take to pilot an airplane, the *business* of flying requires something more than hands and feet.

12

Over and Out

The unification of the Canadian military, ordered by the Honourable Paul Hellyer, reached us in the early months of 1968. No longer at an RCAF Station, we were now flying from Canadian Forces Base Summerside where the squadron CO had morphed from a Wing Commander into a Lieutenant Colonel; our flight commander had gone from Squadron Leader to Major; we Flight Lieutenants had become Captains; and Crew 3's newest first officer was not a Flying Officer at all, but a Lieutenant. Interestingly, Lieutenant Ralph Howey was among the first intakes of RCAF pilot trainees who received their wings by flying CT-114 Tutors and C-45 Expeditors instead of Chipmunks, Harvards and T-Birds. Regardless of roots or routes, we airplane drivers had become CAF pilots in the Canadian Armed Forces. Otherwise little had changed. A regular diet of pilot trainers and crew trainers surrounded another Lajes-loop, a jolly to Jacksonville, and the annual torpedo trials at Rosy Roads.

On June 1st, 1968, Crew 3 embarked on a training exercise that began with a coast-crawl northward along the coast of Labrador, bringing with it a flash-back to the "Rockland" of elementary school geography along with heightened respect for all mariners, ancient and otherwise. Continuing north through Davis Strait and Baffin Bay, an introduction to the incredible landscape of Greenland took us into Thule (BGTL) on its northwest coast where we stopped for fuel. After briefly stretching our legs, we resumed our journey northward to the North Pole around which we completed a 360º turn before proceeding in the only compass direction possible. Fortunately, our navigators were well versed in the art of grid navigation and they made certain we proceeded over Canadian airspace in the Arctic Archipelago on a course toward Cold Lake, Alberta (CYOD). By the time of our landing there, we had added 28:45 to the engine log since leaving Summerside. While certainly good for the graph, our northern venture could hardly be classified as an act of Arctic Sovereignty given our mid-mission launch from a U.S. Air Base in a territory of Denmark. After two days of well-deserved rest at CYOD, another 09:30 in the log saw us home to CYSU.

July sent us back north to Keflavik for another large-scale observance of another large-scale Russian naval exercise centered on the Iceland-Faroes Gap. This is remembered as an intense NATO exercise, and our 16-hour patrols seemed to take us closer to the main stage where ships and planes from several countries were everywhere busy spying on each other. There were no near-misses with Dutch Neptunes this time, just reports of Russian Bears high overhead. As well as getting several close-ups of Soviet submarines, we got a little too close to one of their surface vessels, a fine-looking warship. While raking (not strafing) it at minimum altitude for photos, we could see all its gun turrets tracking us perfectly. Suddenly, POOF! A puff of brown smoke was fired our way as the internationally recognized signal to "stay away or I'll shoot," making that day into something more than just another day on the job. Overall, this second stint at Kef was easier to take. Perhaps several years of bouncing around in our airborne aluminum tube had inured me to Quonset hut existence. In any case, this 10-day sojourn produced lasting memories: the beautifully

stark glacial landscape contrasting with the friendly warmth of downtown Reykjavik; and the hilarious short-order cook at the Loftleidir terminal who often entertained his customers with lively conversation while subtly flipping his big knife upside-down and sawing across his wrist when preparing their sandwiches. Gasps and guffaws were part of the meal. It's amazing how some small pictures remain indelibly etched on my memory stick.

Also, indelibly etched was my exit from the Royal Canadian Air Force soon thereafter. Although not as cut and dried as lunch at Loftleidir, it did have an element of humour slicing through dramatic events that had begun the previous year. As luck would have it, the First Officer on my *Vanguard* flight from Moncton to Montreal for an employment interview with Air Canada was none other than Andy Normand—my first skipper and later hero of Argus 712. Lo and behold, successful interviews saw several of us "Maritimers," including housemate Bradbury and old buddy Salter over at 405 Squadron in Greenwood, as part of the same 1968 pilot intake at our national airline. We were to be a relatively small class of ex-military pilots selected for direct-entry training as first officers on the Douglas DC-9, by-passing more customary apprenticeships as second officer/flight engineers on larger airplanes. Hallelujah, Brothers!

Not quite! A subsequent delay in commercial aircraft deliveries postponed our proposed course date at Air Canada beyond the summer of '68, a fact that was somewhat inconvenient for those of us who had already undergone discussions with seniors about Short Service Commissions (SSC) in comparison to the lifetime advantages of a Permanent Commission (PC). In the beginning, my RCAF service termination process had proceeded smoothly in accordance with accepted norms. Probably since WWII, all SSC officers had recognized that Permanent Commissions in the air force were only offered to the elite 10% or so who had excelled at their jobs while adhering to party lines on and off the hangar floor—including the mess hall. The rest of us were expendable commodities who had best get job applications distributed on civvy street.

Of course, financial acumen (aka necessity) made certain that our requested termination dates coincided closely with our new employment dates while adhering to HRH the Queen's mandatory *four years plus one day* of military service. So far so good. However, early in 1968, the process began to go suddenly and not-too-subtly sideways. For reasons unknown at the time, senior officers were questioning my decision to leave the air force while hinting at my eligibility for a PC. In consideration thereof, my request for one year's leave of absence to qualify for subsidized university education had been denied, thus ending any dream of equal-opportunity promotion while simultaneously taking my fanciful eye away from the developing space program [far-out for the time, eh?]. My amiable squadron CO (W/C Joe) then offered to recommend me as the new Aide to the Admiral of Maritime Command … subject, of course, to my permanence onboard. Meantime, effective immediately, my recently awarded posting to UICP School would be held in abeyance … subject, of course, to my acceptance of a PC. This was a difficult pill for me to swallow: to hell with the Admiral; becoming a Unit Instrument Check Pilot had always appealed to me as a form of higher education leading to improved airmanship and greater understanding of flight operations in general. Although many pilots before me had had that opportunity without having PC status, it was perhaps understandable that my current superiors were reluctant to further invest in my future. In any case, that was the deal breaker for me.

On my way out the door in mid-November 1968, a colleague from within squadron headquarters confirmed having previously seen a message from MARCOM Headquarters strongly urging retention of certain SSC pilots; apparently the increasing demand by expansionary civilian airlines was taking its toll on military staffing levels, and forcing new dynamics into its long-complacent human resources portfolio. While some sadness came with surrendering the traditional blues of the Royal Canadian Air Force, a certain amount of glee came from never having to don the green "Coca-Cola truck driver" uniform of the newly unified forces. Fittingly, my military flying career concluded with a 22-hour, multi-day Lajes-loop patrol that bottom-lined my log book with a total time of 3667:30. Although it took me many places in its 2693:45 hours of flying time, the often-awkward CP-107 Argus would not land on my favourites list. In that month's regular certification of flying times, Flight Commander Al Fox graciously signed off with a *Good Luck Pete!*

Footnotes and Postscripts

1. **John Salter,** my long-time roommate, good friend, and mutual flying partner in the RCAF opted for a Permanent Commission when our scheduled Air Canada intake was postponed in 1968. As a career officer, he became Aide to the Admiral of Maritime Command, the position then being dangled before me. As good luck would have it, the Admiral soon became Military Attaché in Rome, whereby lucky old-buddy John spent a few years flying his boss's T-Bird around Europe, going from one social function to another [with considerable jealousy here]. The few snippets of information received suggest he did a marvelous job of waving the flag while maintaining his reputation for semi-proper behavior. Sadly, his choice of next posting led to his demise in a CF-104 *Starfighter* while training on the weapons range at CFB Cold Lake, Alberta. I have yet to forgive myself for allowing airline duties and company policy to prevent me from being in attendance for final good-byes.

2. **Ralph Howey** (the new *Lieutenant*) subsequently captained 415 Squadron's Crew 3 to the 1971 Fincastle Competition where it won the trophy for most skilled ASW crew in the airborne forces of Australia, Canada, New Zealand, and United Kingdom. Ralph joined CP Air in 1973.

3. The sense of impending change that accompanied my resignation from the RCAF/CAF in 1968 was soon manifested by wholesale retraining of other flight crews to cover the exodus of pilots going to commercial airlines. Many navigators and radio officers were cross-trained to pilot status and numerous other radio officers were retrained as navigators. Ultimately, crews of the replacement CP-140 *Aurora* consisted of fewer officers and more non-commissioned ranks.

4. With thanks to my crew, an engraved 415 Squadron plaque reflecting musical influence of the day remains at my desk — ROWLANDS STONERS Crew 3 "ELVIRA" 1968.

The Skidiots of Expo 67

This story begins in old farm house overlooking Darnley Basin on the north shore of Prince Edward Island where, at the eastern end of a long and exposed laneway, the Gerald Lockhart family's ancestral homestead became vacant when they relocated to a newer home at head of their lane on Malpeque Road proper. Soon thereafter, when non-married personnel at nearby RCAF Station Summerside were finally allowed to seek "off-base" accommodation, the first wave of such-minded escapees included three young aviators who pursued their newly found freedom to the far end of Lockhart's lane, agreeing to rent the 19th-century vintage farm house for the grand sum of $40 per month, utilities not included. Honouring lifestyles imagined or otherwise, 26-year-old Ron Uruski, 25-year-old Wilf Bradbury, and 23-year-old Pete Rowlands christened their new country residence *Beehaven*.

Recently returned from a tour of duty in Lahore, Pakistan, where he had been flying the venerable-already DHC-3 Otter for the United Nations Peacekeeping Force, Flying Officer Wilf Bradbury was now shuttling people and freight around eastern Canada in C-45 Expeditors for Station Flight while awaiting assignment to an operational maritime patrol squadron. Station Flight was a two-plane utility-unit unofficially known as AWATS (Al Wolfenden's Air Taxi Service) in honour of its affable officer-in-charge. While remaining on part-time duty as AWATS volunteers, Uruski and Rowlands had meanwhile undergone ASW (Anti-Submarine Warfare) training on the P2V7 Neptune and subsequently converted to the CP107 Argus aircraft before being assigned to 415 (MP) Squadron at Summerside. After a subsequent eighteen months of experience in flying long-range, long-duration patrol missions over the North Atlantic Ocean with 16-man crews, both Uruski and Rowlands had recently been upgraded to Captain Status and concurrently been promoted to their career-best rank of Flight Lieutenant.

Suddenly it was the summer of 1967; and having ploughed through another typically deep winter and slipped through another infamous spring of deep-red mud, the three boys of Beehaven were delighted to see their long, exposed laneway enter the dry season. From the other side of their country home, it was but a short stroll down to tidewater in Darnley Basin where moored was a beautiful, dark-maroon, deep-V double-hulled power boat—an Arkansas Traveler runabout—with a shiny black 95-horsepower Mercury outboard motor strapped to its back end. The boat's owner, Captain Uruski, had most appropriately christened his new friend *Miss Beehaven …* and a fleet-footed beauty she was: she looked like she could boogie … and boogie she did. As one might expect, however, she did come with strings attached … more correctly, tow-ropes for water-skiers who were soon skittering down the basin and around Cabot Park into Malpeque Bay and beyond; there was no better way of getting to Cavendish Beach. Their long-range tendencies notwithstanding, short bursts of attempted suicide between bridge pylons and among the lily pads of the upper Darnley became major diversions from the responsibility of national defence against Russian submarines.

During the customary de-briefing and rehydrating session following one such high-energy experience, conversation drifted to Canada's 100th Birthday Party and to the desirability of completing a Centennial Project to help celebrate same. Somehow, the subject of water-skiing entered the dialogue, soon followed by a novel suggestion to circumnavigate Prince Edward Island on skis. Silence was the immediate consensus response … slowly giving way to warm chuckles and wide grins. "Well hell, if we're gonna do that, why don't we just ski all the way to Montreal for the World's Fair?" suggested Ron. A moment of shocked silence was shattered by hysterical laughter that segued into highly animated dialogue that dissolved itself into a more thoughtful silence. Within minutes, there were numbers on the table: 3X3X20 = 180 … three skiers doing three hours each equals nine hours per day which, at a conservative twenty miles per hour, equals one hundred and eighty miles per day; 900 ÷ 180 = 5 … nine hundred miles can be skied in five days. "It's possible," came the consensus, "let's sleep on it."

That night's lack of sleep made the decision simple … we were going! With a plan of taking turns behind their boat, the three Beehaven Boys would water-ski the entire distance from Summerside PEI to Montreal QC sometime that summer. With flight planning thus completed, the pilots immediately began preparations for their mission: the first order of business was arrangement for coinciding days-off and/or vacation-time to open a common window of opportunity; the last two weeks of August soon appeared as the most promising period. In the meantime, when squadron duties allowed, it was all practice, practice, practice. Having a now-defined goal in sight (conceptualized at least), the Beehaven trio brought renewed enthusiasm and purpose to their increasingly regular training rituals.

Almost immediately, the proverbial excrement contacted the whirling propeller. Wilf's number had finally come up and he was now assigned to a slot on the very next course at Summerside's #2 (M) OTU (Maritime) Operational Training Unit which was starting within a few weeks. Any scheduled vacation-time or days-off would be superseded by several months of concentrated training in the classroom and in the air while learning crew procedures and ASW tactics on the P2V7 Neptune, then followed by conversion to the Argus and assignment to 415 Squadron. It would be interesting most of the time and exciting some of the time; but, it wouldn't be the same as water-skiing to Montreal. Wilf had no choice: "Sorry guys, I got my orders. I hope you find somebody else and I hope you have a good trip."

Rub-a-dub-dub, in a matter of minutes the three musketeers had become two men in a tub. So much for planning. What now? It didn't take long for us to run out of options among our colleagues: anyone water-ski-capable and remotely interested had already committed their last weeks of summer to squadron duties or to centennial celebrations elsewhere. What now? "How about Sharon?" asked Ron, "She's a pretty good skier and she doesn't go back to school until September?" True enough, 20-year-old Miss Sharon Clark of nearby Kensington had been party to a reasonable number of Miss Beehaven ski sessions and had performed quite well. In fact, it could be said that, despite being age and gender challenged, she was almost one of the boys. Nearing completion of a summer-school session at the University of New Brunswick subsequent to her year of teaching at a Charlottetown high school, Sharon would have a few weeks off before returning to full-time university.

Nevertheless, it was still far from a done deal. Sharon might think twice about rocketing upriver into the sunset in a small boat operated by two airplane drivers "from away" ... especially just before beginning her final year toward a degree in physical education. With their mission on the line, the two boys of Beehaven were on pins and needles awaiting Miss Clark's next weekend home from UNB. Happily for the boys, Sharon happily accepted her invitation to join the Montreal-bound expedition. *Ski-Expo 67* was a go.

Also, happily signing on was F/L Al Wolfenden, of AWATS fame, who volunteered in the role of Public Information Officer. As well as keeping local media updated with mission progress, Al would remain available by telephone as the safety-net coordinator in the event of unforeseen circumstances, highly unlikely as they might be. For both Ron and myself, it was encouraging to have support from our former boss and respected mentor. By this time, we mission planners had more accurately measured the intended route, and by combining local marine-chart information with Quebec highway maps we had arrived at a figure of 685 nautical miles (790 statute miles) from Summerside to Montreal. With a known speed of 20-25 knots (about 25 mph), the entire distance would require approximately 35 hours on the skis. We provided Al with location names for the most-probable overnight stops based on projected distances travelled each day. In the meantime, unbeknownst to all expedition participants, many local farmers and fishers had already begun wagering heavily against successful completion of our carefully planned centennial project, now scheduled to begin on August 15, 1967.

In keeping with our desire for practice and the need to know our limitations (assuming such things existed) Sharon joined us for a one-day high-speed water-ski venture that took us eastbound from Beehaven along the island's north shore, around its broad eastern end and then back along the south shore to Summerside. This shakedown cruise of almost 200 miles proved very useful in identifying logistical loop-holes in the operational plan while demonstrating that one-hour stints on skis were well within the realm of possibility.

A key component for enabling longer stints on water-skis proved to be an idea forwarded by one of Sharon's summer-school professors: tied to the tow handle, a short piece of rope was looped through the skier's waist-belt flotation device and looped back over itself on the tow handle; rope-over-rope friction kept everything in place with minimal tension applied to the rope's loose end. Nothing to it! Having one hand on the handle and one hand on the rope was a simple and secure method; using one hand only on the loose rope-end also proved possible, allowing opportunities to rest alternating arms. In the unlikely event of a skier falling asleep in boredom, this auto-coupler would automatically let go and the entire system would be reset to square-one with a splash of cold water. To facilitate easy operation of our "friction-based auto-coupler," the single-bar handle became the tow-rope of choice, replacing the split-handle preferred for slalom-ski events; and its 100-foot length positioned the skier at a favourable point in the boat's wake. That's the good news. One item requiring further attention was the fuel system: changing from one portable fuel tank supply to another while in ski-mode could prove extremely inconvenient for the person holding the short end of the rope. Another item of concern was the skis themselves: even at moderate speeds, they seemed weak and overly flexible in choppy open-water environments … otherwise, things were looking pretty good.

After weeks of enjoying air shows and formation flying in celebration of Canada's Centennial, we wanna-be water-skiers began August by taking off in opposite directions: while I embarked with Crew 3 on a multi-day patrol with stops in the Azores (Lajes) and England (St. Mawgan), Ron and Crew 5 were given the jammy task of appearing at the Annual Abbotsford Air Show in British Columbia. While there, when not showing off his aircraft, Ron remained busy with preparations for the impending water-ski mission. Having taken (smuggled?) his small motor-bike onboard the spacious Argus, he rode it into nearby Vancouver where he located and purchased a pair of heavy-duty water skis that accompanied him and his bike back to Summerside. Out in the lower mainland of BC, it must have been a sight to behold one man and two water skis on a small motorbike heading inland on the Trans-Canada Highway.

Once back home, Ron attended to the fuel-supply issue by salvaging an abandoned automobile fuel tank from the local landfill site and strapping it to the floor underneath *Miss Beehaven's* forward deck. A flexible hose then connected the tank to a hard-point refuelling hatch fastened into the deck above. Down below, a supply line connected the new tank to the main fuel supply with a simple T-valve. After barely enough time for a test flight of the new skis and the "new" fuel tank, it was time to go.

August 15, 1967

Clad in our homemade *Ski-Expo* team sweatshirts and chomping at the bit, three intrepid would-be water-skiers were ready to launch from Summerside Yacht Club at 0800 hours.

Mother Nature had other ideas: a strong south-westerly wind of 25 knots gusting to 35 knots was stirring Northumberland Strait into a chocolate milkshake that pounded against the island's south shore with tightly spaced four-foot waves capped in vanilla foam. For the moment, skiing was out of the question; also, out of the question was that evening's planned overnight at Tracadie NB. Meantime, hoping for a significant decrease in wind speed, we rescheduled the official launch time for early evening while acquiring last-minute necessities along with a much-needed nap courtesy of a friend living nearby. Thank you, Bill Fowler.

At 1700h, after a brief radio interview for Summerside's CJRW 1240-on-your-dial, a pseudo-departure photo-op for local media was soon followed by the real thing.

With best wishes from Al Wolfenden and from several dozens of the island's finest, Miss Beehaven steamed out of port with Captain Ron at the helm and Pete on the skis while Miss Clark proudly held aloft an official Prince Edward Island flag.

Bon Voyage!

Although the wind-speed had dropped considerably, Milkshake Strait was still in the blender. It wasn't pretty, but it was skiable. One hour after departure, according to our well-thought-out plan and with typical military precision, Ron closed Miss Beehaven's throttle and I took a bath while watching Cape Egmont cycle in and out of view above the wave tops. As soon as I was safely aboard, Ron dutifully plunged into the churning morass and donned the skis. "Hit it!" With a mighty surge, we were soon back on the step again, rocking and rolling toward New Brunswick's eastern shore. As reported in the ship's log … *encountered heavy seas and the going was tough … trip westward gruelling.*

However, once close-in to New Brunswick's lee shore, we were able to maintain a speed of 20 knots while enjoying welcome relief from high wind and heavy sea. While Sharon was taking her turn on the skis, the boys in the boat became aware of an unforeseen hazard—fishing buoys. Although we both had some experience pulling lobster pots on the island's north shore, neither of us had foreseen these floating markers as potential navigational hazards. We certainly did now! Marking fish nets and strings of lobster traps, these buoys seemed to be everywhere, and they were difficult to see in choppy seas and fading light. (The Ski-Expo participants hereby apologize to the fisher-folk for loss of any and all floats, markers, and buoys that proved unavoidable at the last second.) At 2100, after my second stint on the skis, dusk forced a halt to the day's progress abeam Richibucto Head where we re-assembled and began motoring inland toward downtown Richibucto in search of a place to sleep. Easier said than done: with three pairs of eyes straining to identify numerous channel markers surrounded by myriad fishing floats in rapidly receding light, that very slow-speed five-mile journey seemed to take forever. However, good fortune supplied suitable dock-side accommodation and brought comfortable end to a challenging first day: with 60 nautical miles in the log, we had only 625 more to go.

Nomenclature: For readers who may be unfamiliar with the terms, *nautical miles* for distance measurement and *knots* for speed calculation are the aviators' everyday tools—based on degrees of global latitude—which also directly apply to nautical/marine charts. Given the relatively slight differential (15%) and the relatively small numbers involved—notwithstanding the observers' questionable accuracy—it is sufficiently accurate to freely interchange nautical with statute miles as well as knots with miles-per-hour within the context of this story. Although the 24-hour clock had been implanted at a very early age and continues to tick within most life-long aviators, there is no conscious attempt herein at conversion to GMT, UTC or Zulu-time. Similarly, there is no intentional reference to the kilometre which was still awaiting invention in Canada. Meanwhile, excerpts from our collaborative ship's log *are presented in italics.*

August 16, 1967

Departed Richibucto at 0730 despite winds of 20-30 knots and a small-craft warning … sea-state higher than desired …. Boat and skier were able to average 18 knots in slight swells and moderate chop while running between sandbars and dodging innumerable lobster traps. Otherwise, conditions close to shore were "within limits" and far better than what could be seen farther out. In fact, while cruising along the beautiful beaches of what would eventually become Kouchibouguac National Park, the sun came out and the sweatshirts came off … about then, a very large whale, swimming in the same direction, surfaced abeam and very slightly seaward of Miss Beehaven. It was a huge beast: it seemed as long as our 100-foot tow-rope and it seemed to be observing the human activity with its large left eyeball. That encounter was one of those especially intimate moments with Mother Nature that leave humanoids temporarily speechless.

When the cetacean creature slipped softly beneath the surface a few minutes later, Sharon expressed concern that it might resurface directly ahead of the boat or, worse yet, between the boat and the skier. Valid though these concerns were, my mind was elsewhere: a flashback to family fishing trips in Muskoka and memories of trolling for bass and pike brought another perspective—flashing through the waves with beginnings of a new sun burn on his fair skin, Ron looked similar to a Red Devil fishing lure, and trolling for whales was not part of our plan. Of course, if our new whale of a friend had opted for any one of the worst-case scenarios, we would certainly have a Centennial Project to remember … if we lived to talk about it. Fortunately, after grabbing some fresh air and bidding the mission Good Luck, the whale disappeared without further ado. For us, there would forevermore be only one type of whale—BIG.

Peter crossed Miramichi Bay … "No sweat," as Ron was prone to remark. Fortunately for northbound mariners, the islands (Fox and Portage) lying across the mouth of the bay were helpful factors: although the westerly winds down the bay were beginning to peak, wave heights remained at a manageable 3-4 feet, close-in and downwind of the islands. Already well used, the innovative friction-based auto-coupling device between tow handle and waist belt now proved functional and beneficial in the most challenging conditions yet encountered. … *Less than an hour for the 15-mile crossing from Escuminac to Neguac Beach … reached Tracadie by noon, refuelled boat and passengers.*

Continued coast-crawl north ... stopped at tip of Shippagan Island [Île Miscou] *to summon courage for crossing Chaleur.* With no potential accommodations in sight and facing the undesirable option of an upwind struggle back to Tracadie, the southern coast of Gaspé Peninsula was looking pretty good … even though it was out of sight somewhere to the north. Major factors in consideration of our go/no-go decision were wind and wave directions. With both being out of the south-west, we could anticipate slight tailwinds and a following sea on the port quarter-beam as we maintained a desired track of almost True North. Also participating in our human deliberations was an aggressive herd of deer flies—about the size of moose flies— sharing our shelter from the strong south-westerly breeze. Buzz, buzz, buzz … "Yikes … oww! Hit it!"

At 1530 hours, I opened the throttle and Ron popped into ski-mode; Sharon was soon busy securing loose items in the boat as well as keeping her eyes on the skier. Although the wind speed remained fairly steady at 20 knots, the sea-state increased dramatically as we motored into open water … the troughs and swells becoming deeper and wider in very short order. With Miss Beehaven apparently comfortable in the conditions, my challenge was to maintain a fairly constant forward speed that was fast enough to support the skier while maintaining a fairly consistent bow-angle to the rolling peaks that were soon surging to a height of six feet or more. Gadzooks! Where did Ron go? Though often totally out of sight behind a wave, he was still back there gaining appreciation for real-time sea conditions … seeing his tow-boat disappear at the end of his rope slicing through a wave … then, when cresting each swell, looking down at his comrades who were beginning to climb another slippery slope before again dropping out of sight while he maintained firm hold on his end of the rope slicing downward through another wall of water … and so it went. Turning the boat around and heading back was not an appealing option. Likewise unappealing was any thought of having to stop and retrieve a fatigued or fallen skier: along with visibility concerns, any attempt to manoeuvre the small vessel broadside to the prevailing rollers would risk catastrophe. This adrenalin-charged state of "dynamic-stasis" progressed slowly forward at approximately 15 nautical miles per hour (knots).

The outline of New Brunswick's north-eastern corner gradually faded from view behind while ahead there remained nothing but more waves all strikingly similar in size and structure. Although being beyond sight of land was nothing unusual for maritime-patrol pilots, being there at this extremely low altitude was an eye-opener for us. Further widening of the eyes soon came about when an identical thought occurred to both pilots regarding their vessel's one and only navigation aid—their compass. "That's right," we both muttered, separately and simultaneously, "we tested the new fuel system, but we never got around to re-swinging the compass." Yes indeed, addition of the metal fuel tank in close proximity to the forward-mounted magnetic sensor would certainly have caused deviation in its accuracy. Yes, as a matter of fact, compass readings had already seemed a bit quirky. Alas, there was nothing we could do about the compass at this point. While Ron extended his body atop each swell, hoping for a glimpse of terra firma, I began steering Miss Beehaven ever so slightly more to port, as in more upwind, whenever the occasion permitted; missing our flight-planned port-of-call would be one thing … missing the Gaspé Peninsula altogether would be quite another.

At this novel juncture, Sharon coined a new term that would remain in effect evermore. In one moment of editorial brilliance, our expedition's semi-official name of *Ski-Expo 67* was reduced to mere subtext of her new title—we became *The Skidiots.* Concurrently, while seeing another whale blowing-off steam nearby, she surmised that her previous day's first turn on skis might indeed have been her last. The future would prove her assumption correct and her wisdom intact.

Land ho! Riding the waves ever northward, Miss Beehaven slowly but surely advanced toward a large government-looking wharf emerging from a welcome coastline inhabited by buildings, roads, automobiles, and even people. As Miss B. arced toward calmer water, Ron timed release of the tow-rope in order to catch hold of the dock-end ladder … well, almost. *Completed the 20-mile crossing to Grande-Rivière in 1½ hours ... remarkable determination by the skier and excellent navigation by the crew.*

With congenial assistance from locals on the dock, we uploaded fuel and snacks before re-launching in hopes of rounding Gaspé before sunset. Although wind and sea-state decreased as we motored east, there loomed before us an unforeseen challenge of staggering proportion— Percé Rock. Notwithstanding any reasonable thoughts about reasonable risk, I found myself with the perverse fantasy of Captain Ron steering us through the vaulted arch of this great national icon enroute to our country's great international showcase. As good luck would have it, any temptations-that-might-have-been were immediately thwarted by a hundred-eyed monster swooping from the skies—Argus 20719, a familiar old bird, pounced in predictable manner and conducted a series of low-altitude photographic strafing runs, bringing pride of accomplishment to the water-skiers and an impromptu air show to the people of the rock. We would later learn that the aircraft was captained by our friend and mentor, Squadron Leader Les Shumka, who had extended his crew-training exercise to look for an unidentified vessel reported to be trolling for whales in the Gulf of St. Lawrence.

As the old adage goes, pride goeth before a fall. Perhaps distracted by overhead excitement, the Skidiots relinquished all sense of accomplishment and almost cashed-in their chips while entering harbour to change skiers. A last-minute, as in last-second, change of direction by the tow-boat almost eliminated one dory, one ski-rope, one pair of skis, and one skier. Down but not out, we accomplished the skier change mid-harbour and quickly rode Miss B. out of town before having to meet and greet with any local spectators.

Skiing around Cap de Gaspé was a delightful experience after Chaleur: light wind, soft-rolling four-foot swells in silver light. We called it a day at Rivière-au-Renard QC, having logged 150 nautical miles (173 sm) on the journey from Richibucto NB. That day's extended effort had made up for the delayed departure from Summerside and had put us back on schedule for this second overnight. Diligent planning, however, had not anticipated the long trek from Renard's wharf uphill to the nearest motel on the highway. Significant increase in the cost for fuel, food, and lodging also caught our attention. The daily log entry reflected a rather philosophic approach … *the worst is probably behind us and we should make Montreal on schedule if the muscles and the money hold out.*

August 17, 1967

Dawn graced Fox River with calm seas and light winds. Harbour last seen astern at 0830 ... made good time, averaged 22 knots ... spotted several whales and schools of dolphins "flying" close formation, some within 50 feet of the skier. [Belugas?] [Porpoisii?]

It was fun while it lasted. After one quick skier-change at Cloridorme, the second change became a prolonged event at Rivière-la-Madelaine when headwinds increased beyond 20 knots, making for unpleasant if not impossible ski conditions. As such, a unanimous decision to remain in port pending lighter winds allowed for rest as well as for necessary repairs to Miss Beehaven. The long-range bow tank which had ripped from its moorings during the previous day's "jolly" across Chaleur was repositioned to rest on the cockpit floor-deck just ahead of the seats … and just below the magnetic compass. *Tres fatigue! After house-keeping chores, we explored the community (charming!) ... entertained les habitants with our French dialect and Polish accent. Local fishermen again offer transportation and best wishes ...*

After foraging for food and napping on the riverbank, we agreed that the possibility of skiing an additional 20 miles in possibly lighter winds near dusk might jeopardize plans for an early-morning start while also exposing us to the risk of running out of daylight far from civilized accommodation; camping gear was not included in our onboard accessories. That 40-mile day concluded with a morale-boosting telephone conversation with our pal Al back in Summerside … only 435 nautical miles remaining.

August 18, 1967

Arose with the sun at 0500 in high spirits for a full day of skiing. Surprised by a 15-knot land-breeze and a 3-foot chop … unable to maintain 20 knots. By then, another factor escaping our pre-mission planning had come to light—water temperature. Skiing from relatively balmy conditions in The Gulf and heading back toward our previous experiences in southern Ontario, the possibility of decreasing water temperature had not crossed anyone's mind … until now. Without attempting to understand water-temperature trends, we accepted woollen sweat socks over Vaseline-slathered feet in cold-rubber ski bindings as the new order-of-the-day. With not-so-cold feet and with aid of the friction-based auto-coupler, Ron established a new endurance record while skiing in marginal conditions: two (2) hours saw him cover the 35-mile distance to Marsoui in time for breakfast and an upload of fuel for our trusty steed. Here, the long-range fuel tank underwent further modification inspired by disintegration of its flexible rubber filler hose. "Pas de sweat!" exclaimed Captain Uruski, "We'll just refuel straight into the tank and plug 'er up with an old sock."

Resuming our westbound track with me on the boards, we were heartened by the sight of more whales and simultaneously discouraged by a dramatic increase in wind speed … *soon plunging into 4-6-foot waves pushed by a 25-knot west wind … propeller bouncing clear of the water … when the boat slowed down, Peter went down.* After several of these shivering experiences and travelling only five miles in twenty minutes, Miss B. pulled a one-eighty toward the nearest port. When we tied up at the nearest dock, it was still morning … 1000 hours to be exact.

At the small community of La Martre, our largest reception so far (ten children, one fisherman, and one lighthouse keeper) gave us a tour along with wind forecasts and encouragement … also let us rest on the lighthouse floor during a thunderstorm. Enjoyed fine French-Canadian cuisine while staring out to sea … only 30 miles today and tomorrow doesn't look much better. Contrary to previous entry, the worst may yet be ahead of us …

Surprise! Seeing a decrease in wave height along with decreasing wind speed, we sprang back into operation at 1900 that evening. Bidding fond farewell to le proprieteur et sa femme de chez Charles, we were determined to use any daylight available, striving for a narrower channel upstream where conditions might be more favourable. That evening's cruise in softening winds and gentle swells was welcome change from the previous 48 hours. Hampered only by decreasing visibility in moderate rain showers and by an unimaginable amount of driftwood, we skied the 15 miles to Ste-Anne-des-Monts in 50 minutes—just like the good old days—before impending darkness forced us to call it a 45-mile day. After securing Miss B. at the large government wharf, we found comfortable digs in a charmingly small hotel dans la ville where we retired early with aching limbs. With any luck … we thought wishfully … the next day's discouraging weather forecast might be inaccurate.

August 19, 1967

Wrong again! August 19th was a black day in Ste-Anne-des-Monts. Not only was the weather forecast correct with its high winds and heavy rain, but our day began with introduction to a local bonhomme who had come to the hotel seeking the owner of an unfamiliar boat, a small maroon-coloured runabout sporting a black-coloured Mercury engine. Our new best friend had found Miss Beehaven, with severed moorings, stranded on the rocks some distance downstream of the wharf. Then came for us one of those especially intimate moments with Mother Nature that give human beings glazed eyeballs and hollow pits in their stomachs. We remembered leaving our beloved boat almost resting on the harbour bottom with at least 20 feet of line attached to the towering dock. The tide couldn't have gone out farther. It must have come in before the storm peaked. She must have been torn loose by gale-force winds. Why didn't we do better? Was crew fatigue becoming a factor?

Happily, Miss Beehaven's injuries appeared to be but minor scrapes and bruises, and the engine operated normally. We were lucky. Moreover, by refusing compensation for helping rescue our vessel, the bonhomme of the day helped educate us about the river and its people. Later, in moderating weather, we motored quietly upstream and ducked into a nearby tributary where Ron, courageous and courteous as always, volunteered a quick dip in very cold, clear water to inspect his vessel's underside … it looked okay, he was happy to say.

Leaving Ste-Anne-des-Monts behind, the "crack-of-noon-club" was again on its way, maintaining a respectable 20 knots into medium-size waves. With one skier-change enroute, we reached Matane for refuelling, after which one more enroute change saw us into Trois Pistoles. With ski-speeds close to 25 knots in lighter winds and gentler swells, this last 80-mile segment was completed in 3½ hours, a welcome reminder of what was possible under normal conditions … *Lower air temperature after last night's cold front made jeans, sweatshirts, and windbreakers necessary for skiing … with Vaseline and socks, toes still suffering in cold water … Pete set a new endurance record of 2:20, skiing 60 miles in chilly conditions.*

Yes indeed, insensitivity can be an advantage at times. Notwithstanding temperature influence, the original concept of regimented one-hour shifts on skis had already been long-erased from the flight plan menu; in fact, the very first skier-change in the middle of Northumberland Strait on departure day was the only one of its kind. Bay crossings and fuel stops had soon become governing factors influenced by shoreline topography and landing-site availability. Whenever possible, arrivals and departures were planned around higher and drier locations, be they manmade structures like boats and docks or more natural features like shallow beaches and rock ledges. As already experienced, however, there were always exceptions.

Reached Trois Pistoles at 1900 just before low tide … tides here in the "Sea of St. Lawrence" are more intense than expected (as learned last night). We queried several locals about the best place for mooring our boat and received a different opinion from each person asked. At dinner, Ron came down with symptoms of the flu and retired early, covered in Vicks and Wintergreen … probably in danger of slipping out of bed. We are tired, but our goal is in sight … sort of … we did 125 miles today with a late start … 265 remaining. All we can do is press on and hope for better weather …

August 20, 1967

August 20th was a grey day for three dudes in Three Pistols. Having barely survived a restless night in reasonably priced accommodations … directly above Saturday evening's very loud and energetic live band playing to a packed house in a cheap motel … we had a slow start to a long and difficult day. Ron definitely had the flu, but he was eager to press on. … *Unable to leave at 0600 as planned because of dense fog. By 0900, the fog had lifted, but the tide had already gone out … Miss Beehaven was high and dry on a mud flat. By noon we had enough water, but the fog had returned with steady rain. We set out anyway …*

The crack-of-noon club headed back to sea with a revised route in mind. Recently acquired marine charts had confirmed our suspicions: although still rather wide, the big river's southern side was strewn with islands and shoals in generally shallower water while the deeper shipping channel hugged close to the northern shore. Seeking better water and possible protection from the prevailing westerly winds, we aimed our sights (and compass?) toward Cape Dogs near mouth of the Saguenay River which comes in from the north. … *A long crossing in poor visibility, about one mile in fog … weaving around hazard markers and shoals …*

As we soon learned, general-use maps and rudimentary, scale-deficient nautical charts lack many details and thereby offer a false sense of security, especially in seldom travelled areas with complex river-morphology. Although all major navigation hazards are well marked with mainstream river traffic in mind, many of the minor ones fall through the cracks on navigation charts and they remain lurking in the unmarked shadows, as in shallows, of their better-known brethren. As soon learned, maps are next to useless when pioneering a new route through unknown terrain under conditions of flat light, relatively smooth water, and very poor visibility. Slicing across the grain, as in across the river's flow, we were penetrating a rock-infested maze where adult boats wouldn't go; at 20 knots, those hazard markers would come and go pretty quickly in the fog. Suddenly, with a noticeable tug on the stern rope, there was Uruski skiing wide-right of the wake and frantically waving his right arm in the same direction. Without hesitation, I cranked a hard-right turn, almost sinking him in lost momentum, before regaining composure on a track slightly right of its previous. Sure enough, Ron-on-skis had seen what his fog-bound colleagues had not—a rapid decrease in water depth because of an unmarked shoal or because of a side-lobe on the one we were trying to avoid. Several less-exciting moments in an hour of high anxiety saw us safely over to the north-shore channel for a skier change. "Wow! That was close," declared Captain Ron; "We coulda lost a prop back there … what an ugly place to be putting on the spare."

Although light rain continued and the visibility remained fair to poor, all three of us became impressed by what we could see of the "picturesque" north shore—smooth-granite cliffs rising steeply from swirling green waters and disappearing upwards into fine white mist. At the mouth of the Saguenay, we were also suddenly in touch with a major source of the cooler water. We were still a long way from Muskoka, as we astutely agreed. Continuing to navigate interesting currents and rip-tides while poking through patches of misty-foggy stuff, Miss B. took us safely to St-Siméon where we found welcome shelter from the elements.

By the time ski-conditions finally improved at 1900, we had already called it a day, and a gracious inn-keeper provided inexpensive (and comfortable) lodgings as well as a clothes dryer for our sodden duds. Weak but still hanging-in, Ron was able to acquire better-scale river charts from skipper of the St-Siméon–Rivière-du-Loup ferry. Along with more than a few extras, we had managed to ski 40 miles closer to Montreal in miserable conditions after another late start. Having abandoned all hope of reaching Expo on schedule, originally planned for that very day, we could now only hope Ron's health and Mother Nature's cooperation would permit completion of the remaining 225 miles. … *tried without success to get an accurate weather forecast … it seems cold water and fog is normal around here … we're getting used to it and we'll make Expo eventually … as long as we don't take unnecessary chances to keep moving.*

August 21, 1967

The day began slowly with a late breakfast surrounded by dense fog showing little sign of moving on. When repositioning our boat at 0900 because of an outgoing tide, we could barely see the wharf 100 yards away. At about 1100 hours, visibility improved to almost 3 miles with a stirring of downriver wind. "Hit it!" I called before being plucked from a dock ladder to slither effortlessly on the creamy bubbles and silky green water behind Miss Beehaven. So far so good: variable visibility … popping through light fog patches … sunlight shining on hill tops poking through denser foggy-stuff packed onshore … oh-oh … suddenly, not so good … visibility poor and becoming poorer. I remember quickly finishing-off my chocolate-coated energy bar and stuffing the wrapper into the front pocket of my anorak and doing up the zipper before placing both hands firmly on the wheel … er, tow-handle. By then, Miss B. had disappeared from view, 100 feet away at the other end of my rope. With no audible change to the boat's power setting, there remained little choice but to hang on and follow the wake. Without warning, as if it could be otherwise … and extremely close by, as if it could be otherwise … the big blunt-end of a sizable wharf flashed by on my right side, followed immediately by a moored sailboat flashing by on my left … "Hmm, pretty thick soup … best stay right in the centre of the wake" … oh-oh … sensing a sudden loss of forward speed accompanied by the sounds of an agitated engine and a cavitating propeller going nowhere, I knew I was going down.

Prepared for the all-too-familiar-semi-slow-sink into very cold water up to my neck, I was pleasantly surprised to feel the skis strike river-bottom as the surface water reached my knees. There was nothing to do but shuffle hand over hand toward the other end of the rope … Poof! As if by magic wand, there was Ron and Sharon in bright sunlight aboard Miss Beehaven … Oh, good golly, look over there! Close by to our right, automobiles and people were easily seen moving along a riverside street lined with shops … we were in the middle of a town … Bienvenue a Malbaie! It was one of those especially intimate moments with Mother Nature that give human beings no choice but to laugh out loud at their collective folly.

Please refer to yesterday's closing entry … we did it! We stuck our necks into thick fog and ran aground in Malbaie Basin (appropriately named) at 1155 on August 21st … just before the wind came up and blew the fog away. We're lucky not to be just another wreck on the river chart.

With no apparent damage to boat or motor, we quickly floated Miss Beehaven into deeper water and resumed skiing upstream before attracting any unnecessary attention from the townsfolk. Under a clear sky with light winds and unlimited visibility, we hustled into nearby Pointe-au-Pic for coffee and debriefing. None of us seemed any worse for the wear and tear of our recent experience; everyone wanted to get going while the going was good. When queried about the state of Miss Beehaven, Captain Uruski responded nonchalantly: "Pas de sweat, she's double-hulled and she's got at least one left and we're a coupla days behind … we'll keep an eye on her and deal with whatever happens if and when it happens. Let's go!" Understandably, while still suffering flu symptoms perhaps enhanced by his previous underwater inspection, Ron wasn't eager to go below again. And of course, the captain's faithful crew members were not about to argue with him. Miss B. seemed fine and the captain is never wrong … so, off we went again.

After almost an hour into stiffening wind and chop, we rounded Cap aux Oies (Goose Cape) and found ourselves directly into a wind of more than 20 knots and into even larger waves. Persevering toward Île aux Coudres, we hoped to find the elements more relaxed in the narrowed channel between the island and the north shore. Instead, the deeper we got into the channel, the higher the waves became; although the wind remained relatively constant, we were soon surfing over steep rolling swells (okay, waves) that were more than six feet in height (Yes, really!). Ron pulled Miss B. into the dock on Île aux Coudres and I splashed down right behind. Enough was enough … at least for the moment.

We had not given up yet, however. (Surprise.) While hanging out on the dock and waiting for the wind to drop, we were befriended by a knowledgeable yachtsman out of Chicoutimi who advised that we were looking at the worst section of the entire St. Lawrence River. Oh, really? Oh, yes! Although it's the deep-water shipping channel, the next ten miles features a river current of 5-10 knots usually agitated by significant tidal effects: severe rip-tides, eddy lines, and even whirlpools are common. Inbound ocean-going freighters are known to sometimes wait for a tide change before attempting to climb this steep and confined chute. "Golly, gee-whiz," chorused the innocents, "this is getting more interesting all the time."

"Action stations!" was called at 1700 hours. A big freighter was coming our way, chugging upstream through the channel of interest. "Hit it!" Ron opened the throttle and Miss Beehaven took off after the freighter … but, Peter did not. Instead, I went for another short-cool swim when the tow-handle separated from my end of its frayed rope. "No sweat, here comes another freighter … the tide must be coming in." With a repaired tow-handle and a successful launch encouraged by cheering spectators, the maritime patrollers were back on task, closing-in on the intruder from directly astern—a Detroit River technique known as the Uruskiovitch—hoping to get close enough and slow enough to benefit from the smoother water in its wake while still going fast enough to keep the water-skier skiing. Ron expertly manoeuvred Miss B. close-in behind the behemoth, so close in fact that, 100 feet back on water skis, I had good looks at the large, brass propeller blades slicing steadily through the liquid medium; in fact, I could almost read the labels on beverage cans held by two grinning crewmembers leaning over their rear-deck guard rail. It must have been an entertaining sight: a small boat and a skier trying to fly formation on their big vessel as it churned upriver into a 30-knot wind. Even in their large boat's wake, we were dancing (more like wrestling) with 6-foot rollers.

Too slow! Accepting futility, Ron broke formation and increased speed to keep me afloat. It was not a pretty sight. Outside the big ship's wake, we intellectually challenged fair-goers were immediately into 8-foot waves—yes, eight feet from trough to crest—rounder and softer maybe, but 30 per cent higher than those experienced in Baie de Chaleurs; similarly, now the tow-boat and skier were disappearing from each other's view at opposite ends of a long rope that pierced rolling walls of green water. That didn't last long. … *Realized the nearest port was our best hope, but the river wouldn't wait … bounced Miss B. clear of the water … hung on in desperation while Rowlands went for another swim.*

Then the real fun began. Trying to re-unite boat and skier in heavy seas and high winds is no easy task. Keeping the other half in sight is a problem for both sides; and with addition of rip-tides and eddies, it becomes a complex exercise with erratic variables. Hampered by skis with minds of their own, the swimmer is vulnerable to injury by the boat which is being forced into critical manoeuvres under threatening circumstances; attempting to remain close to the swimmer, boat and crew are in constant danger of being capsized. Should that have happened, all three of us would have been in dire straits. The 15-minute rescue process that seemed to take an hour was one of those especially intimate moments with Mother Nature that allow humans to examine the fine line between fear and panic. Fighting a strong eddy line amidst high wind and waves, we were fortunate to get all our pieces back together.

By the time the skis and I were back onboard, Miss Beehaven had been pushed a considerable distance west into Baie-St-Paul and, given our vulnerability and desire to get ashore, we set out toward the town-site at head of the bay. Not today, said the big river. As benign as it might look on a simple map, this broad, shallow bay is not to be taken lightly. In this instance, the blinding glare of a late-day sun made it extremely difficult and sometimes impossible to properly identify the markers of a very sinuous channel, especially while pitching and rolling near the edge of our craft's safety envelope. Furthermore, the strength of that afternoon's wind, waves, and currents sometimes made it impossible to track the channel when we did find it. The short story suggests we had too much light to see where we were going even if we knew where we were going. On the back side of a big wave, Ron deftly kicked Miss B. around and pointed her back towards Île-aux-Coudres where our recent fun had begun.

With the sun at our backs, we pitched and rolled slowly home while counting our blessings. Sure, we had pushed the envelope again; but hey, no-one said it would be easy; and we had got ourselves out of a tight spot … it could have been worse. If nothing else, this Baie-St-Paul experience underlined our good fortune for not being forced to attempt a similar rescue in the middle of Chaleur. With tails not quite between our legs, we finished this day on the water in humble gratitude. At the dock on Île-aux-Coudres, we were welcomed back by a growing number of fans and cheerleaders who, in boisterous good humour, helped moor Miss Beehaven and unload her contents. Among them was the affable yachtsman from Chicoutimi who recommended (and probably arranged) accommodation and transport to an island inn nearby.

August 22, 1967

Arrived in darkness and departed in darkness … not quite sure where we are, but we sure are warm and dry … superb hospitality courtesy of "Le Capitaine" who roused us at 0400. Aah! Fresh coffee with toasted homemade bread and butter never smelled so good! Fatigue and flu symptoms still with us, but want an early start after only 35 miles yesterday … our kind host got us to the dock by 0500. Our "lucky streak" was still with us! The wind came up with the sun … headwinds of 15-20 knots against another inbound tide. (Nobody told us there would be tides like this!) Choppy waves (4-6 feet) forced us into Petite Rivière [P-R-St-Francois] *in a rain shower … less than 10 miles.*

Another great day at the office! By 0630 we were already soaking wet and once again wandering aimlessly around a strange new place. After long-awaited soup and coffee at 0830, we were back on the water, having noticed (imagined?) a drop in wind speed. Persevering for more than an hour in moderate chop, we managed the 20 miles to Île d'Orleans where we hoped to find some wind protection in its narrow northern channel. Wrong again! A blast of air funnelling down the narrows ruffled the river into unskiable conditions and forced us into Ste-Anne-de-Beaupré. Then, for blessed reasons unknown, the wind speed suddenly dropped while we were eating lunch, and we immediately returned to the challenge at hand. Enjoying the feel of significantly warmer water, we took advantage of our first normal ski-conditions in many days: lighter winds and smoother swells saw us do a more-normal 25 knots across the water (the 5-knot river current reduced our groundspeed to 20 knots); and an hour of such skiing saw us safely into Québec City Yacht Club. On the way there, we became part of a pretty picture—skiing alongside Canada's only aircraft carrier, HMCS Bonaventure, with Le Château Frontenac dominating the view-scape behind.

Made a quick pit-stop and a telephone call to the Expo Marina … hit the boards hard, trying for distance … thunderstorms and rough water for 1½ hours … still a long way to go. Weather later improved for smooth sailing and easy navigation in the shipping channel … speeds above 25 knots. Ron got us into Trois Rivières with a new trip-record of 2:40 on the skis.

Obviously, Ron had finally left his nagging flu symptoms somewhere downriver. Looking upriver into fading evening light, the ever-enthusiastic (foolhardy) adventurers decided to keep pushing toward Montreal. Not tonight, said the big river. Rougher than expected water and rapidly encroaching darkness forced abandonment of our attempt to cross Lac St-Pierre toward Sorel; instead, soon after entering the lake, we made for the nearest port, Rivière Nicolet, on the south shore. However, finding no available accommodation in that fair town, we had little choice but to turn on the night-lights and head back downriver to Trois Rivières.

Lo and behold! There to greet us was none other than the friendly yachtsman from Chicoutimi we had met yesterday at Île-aux-Coudres. Monsieur Mario Lavoie was a true friend indeed. When meeting for dinner in the marina restaurant, he warmed our hearts by offering his boat as overnight accommodation while he visited friends and colleagues in the nearby community. Blessings indeed! Captain Lavoie's yacht, appropriately named *La Canadienne,* was a familiar-looking Atlantic-coast lobster-boat hull remodelled for comfort and refitted with all the tools of the trade. With a spacious cabin and one of the most seaworthy hull designs known to man, Captain Lavoie operated a very fine vessel often in the service of Hydro Québec. Merci, Mario. Bonne nuit!

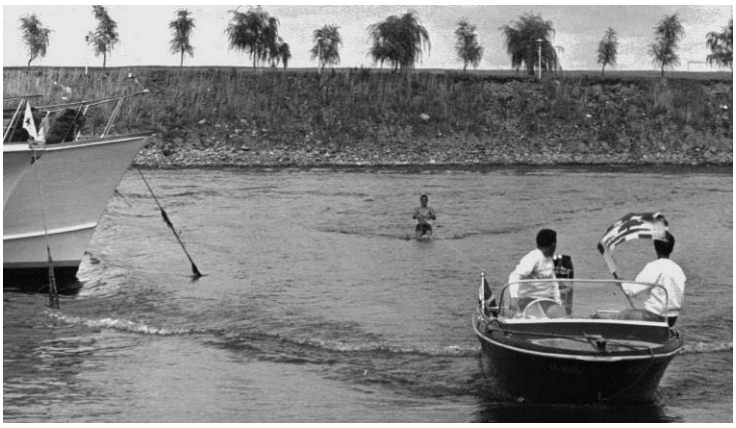
August 23, 1967

Not surprisingly, our now infamous "light morning wind" again failed to materialize, and it didn't take much of a breeze to make the shallow waters of small Lac St-Pierre more of a challenge than expected, requiring one and a half hours of rough skiing to reach Sorel at its top end. After consuming a large breakfast, it was time to get ship-shape before entering Montreal for a reception at the Expo Marina. With this public event in mind, we menfolk each took the risk of getting haircuts from an unknown barber … in order to look somewhat like officers and gentlemen; Sharon meantime found new sweatshirts for each of us … anything to appear neat and well groomed, if not well rested. Miss Beehaven also had her turn at being cleaned up and straightened around … after eight days of extremely tough-sledding she wanted to be seen as the fleet-footed beauty she really was. That's the last Miss B. ever saw of her troublesome long-range fuel tank: it had served its purpose and it was time to say good-bye … as in good riddance.

Without so much as a glance at our compass heading, we departed Sorel at 1200 hours and sauntered upriver for one more skier-change prior to arrival. Some distance short of destination, an RCMP patrol boat came out to meet us while enforcing the law of the land and water. For reasons unknown, local officials were concerned we Skidiots might transcend federal regulations by having two people skiing in formation instead of having two people in the boat. Safety implications aside, this federal law could not be ignored, especially with the enhanced media attention focussed on this world stage; otherwise, three rubes from down east might have generated considerable embarrassment for officialdom within the Expo Marina … and beyond.

Perhaps contributing to this misunderstanding was the attempt by news media to report on expedition progress via relayed telephone calls with Al Wolfenden back in PEI. By this time, media drama had identified Ron's health issue as the primary cause of our delayed arrival and "pretty Miss Sharon Clark" had become "captain of the boat." This was not correct—though Miss Clark was certainly attractive—Ron was at all times the respected and undisputed captain of his boat, delegating the helm and other duties as appropriate. More importantly, Ron's flu-bug, harsh and persistent though it was, had not delayed our progress whatsoever—winds, waves, and weather were the limiting factors. Although I had volunteered for a slight majority of ski-runs over several days, iron-man Uruski, when not skiing, was always driving Miss B. … usually after pushing hard for another launch into inhospitable conditions.

Now enjoying unusually flat water under a rare bright sky, Miss Beehaven entered the Expo 67 World's Fair Marina at precisely 1400 hours on August 23, 1967 … with Ron at the helm of his boat, with Sharon holding aloft the flag of Prince Edward Island, and with skier Pete at the back-end of the rope. As well as the police escort, our entrance was accompanied by a three-gun salute (near as we can remember). Respecting the marina's posted speed and wake restrictions, our joyful expedition refrained from staging an arrival air show or even doing a high-speed fly-past. Moreover, facing a confined entry slip leading to the reception party at the head of a horseshoe-shaped dock arrangement—lacking in available space anywhere—the skier would be unable to *step* ashore in the preferred manner. Ron had no choice but to steer toward the reception and to dutifully retard his throttle, whereupon I had no option but to perform my now-familiar semi-slow-sinky-thing in accustomed manner. We had made it!

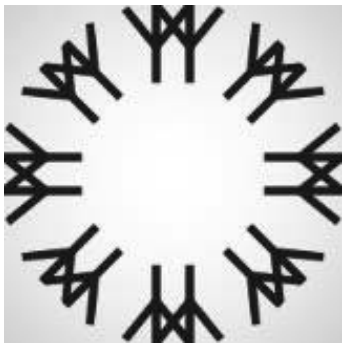


Getting our gear and ourselves together after an unceremonious splashdown, we clambered ashore to be welcomed by the Marina Commodore, M. Lavigne, accompanied by Ed Scallen of Expo Public Relations. Also present at the dock-side reception was a public relations officer from the Canadian Armed Forces and numerous reporters from commercial media outlets as well as a surprising number of enthusiastic spectators who offered handshakes and words of congratulation.

At conclusion of formalities, we were instantly immersed in a question-and-answer session with radio and print media. Feeling more relief than celebration, and being still too close to the action for appropriate perspective, we found ourselves a bit overwhelmed, lost in strange territory. Ironically, these press interviews inspired more fear in us than did any experience of the previous week. “They were hell!” came our consensus. Ron attempted to set the record straight regarding his overstated illness while being honest about how it feels to be out all day in an open boat in the pouring rain; I tried to verbally rationalize why our summer trip had taken twice as long in summer weather as it would have taken in seasonal weather. Sharon’s less than tentative summation brought appropriate end to the media inquisition: “I thought these guys were a bit crazy when we started … now I think they’re insane.”

“You had to be there,” goes the old refrain; and yes, it seems a certain amount of near-insanity was necessary to complete a trail-breaking endeavour within its limiting timeframe and under less than ideal conditions. However, even while safe and sound on the Expo grounds, we did not entirely escape water-based anxieties: after being introduced as guests of honour at the fair’s daily water-skiing exhibition, we found ourselves in great fear of being asked to participate in the show. Our collective sentiment was palpable if not verbal … no way did we want to demonstrate our semi-slow-sinky-thing alongside professionally composed, expertly performed, high-speed aerobatics. Accompanied by audible sighs of relief, common sense prevailed among the hosts, and good fortune smiled upon their guests … we remained happily “off the hook.”

Good fortune also shone warmly when our pre-arranged Montreal accommodation fell through. Guess who was there to save the day? Again, it was none other than Captain Mario Lavoie, the friendly yachtsman from Chicoutimi. Having tied-up in the marina for a week of visiting with friends and family, he once again offered *La Canadienne* as accommodation for the three long-distance voyageurs from the east coast. Blessings indeed! One minute we were homeless, the next minute we had executive-class accommodations with all the amenities, including a rotary-dial telephone and a 13-channel television set, while moored among the rich and famous … smack-dab in the centre of a world's fair venue. Hallelujah! Again, our plan had gone down the tube, and once again we came up smelling of roses. By this time, we had come to regard Captain Lavoie as almost larger than life … the perfect icon for all the human warmth we had encountered on our upriver odyssey. In expressing our gratitude to Mario, we thank all the wonderful people who assisted and encouraged our 1967 Centennial Project—a journey only made possible by some people and made pleasurable by many.



Postscript

Half a century later, heartfelt thanks go to Sharon and Ron for being such wonderful travelling companions and for researching their random-access memories to help this story be told. Special thanks also to another wonderful travelling companion—*Miss Beehaven.* After having conveyed her three "older children" safely to Montreal in trying circumstances, darling Miss B. underwent major surgery to repair fist-sized ruptures in her bottom-side skin. Yes, that foggy day in Malbaie had taken its toll; in fact, Ron's repair bill of two thousand 1967 dollars about equalled her original purchase price. It is also worth noting that our total expenditures for the eight-day Ski-Expo 67 adventure would barely buy one day's food, lodging, and fuel in today's dollars.

Also worthy of comparison are subsequent advances in communication and navigation aids. While a cellular telephone or a satellite telephone would have been extremely useful for routine messaging as well as for bottom-line safety issues, a Smartphone or a portable computer of any kind would have made it possible to research everything from food and fuel locations to updated weather information and accommodation options ... all while still on the move, as in still on the water. Also now available, good-old GPS (Global Positioning System) will pinpoint present position on a moving map display alongside all the relevant navigational references an operator could ever ask for: constant track and groundspeed readouts, constantly updated time and distance calculations for every trip segment, as well as on-request time and distance bearings to almost everywhere … even compass headings. How good is that? Of course, the distraction factor remains an unknown: we might have stumbled into more trouble by playing with these toys than we did by looking over the windscreen and peering through the fog.

Foreseen as a simple multi-day water-skiing session following reasonably predictable shorelines, Ski-Expo 67 demanded little in the way of navigational systems: in fair-weather, outdated charts and an inaccurate compass would be of minimal concern. However, the conditions actually encountered soon made the trip into a map-and-compass exercise … with marginal maps and a faulty compass … something that would warm the hearts of our primary flight instructors, a mission conducted under marginal VFR with ample opportunities for nearly-dead-reckoning.

Although our mission was successfully completed, the aviators' tired adage about skill and science winning-out over ignorance and superstition does not apply. If anything, our 1967 adventure was but a case of determination and perseverance being blessed by mercy and good fortune. In more mythical terms, it could be seen as an instance of Mother Nature and Father Time sharing a good chuckle while watching Naïveté, Ignorance, and Bliss struggling upstream against the current. And yes, for all three participants, this water-ski effort was certainly not our first nor our last attempt at swimming upstream against the flow. While awaiting production of a motion picture in the genre of adventure-comedy, *The Skidiots* survives as a cartoon-fable for our grandchildren.

13

The Navajo

After my *Good Luck Pete!* sign-off from the Canadian Armed Forces in November 1968, the next entry in my log book is dated February 5, 1969, whereby the Director of Civil Aviation, Ted Went, authorized my receipt of Barbados Commercial Pilot Licence #6. The fact that this licence is awarded without the holder every having to turn a wheel or a propeller says much about general regard for quality of the RCAF flight training program; and, its occurrence barely ten weeks after the previous one attests to the speed of events since my departure from 415 Squadron. Accelerating in an unforeseen direction, my revised flight plan had brought credence to the old adage about life being what happens when you're planning something else.

By end of the previous year, after wrestling with career options and aspirations, life had become a black hole of unknowns, at once filled with everything and containing nothing … the future being nothing but fear and excitement. For the first time since elementary school there was no form of employment in my daily schedule, no rope or railing to hang onto for guidance and support. Nevertheless, whatever the surprises might be, the unknown devil ahead seemed a better bet than the deep blue sea behind. Fasten your seat belts! Accepting my proposal for an endless honeymoon to everywhere, water-skiing partner Sharon Clark joined me in marriage on December 21, 1968. Although probably [certainly] both too young to properly appreciate the complexities of our undertaking, we did understand the then-current Island Ethic whereby it was considered downright immoral for unmarried people to travel overnight together … unless, of course, water-skiing with a chaperone. Flying off into a raging blizzard during the night of the Winter Solstice seemed like the perfect time to be heading south together. Where we would stop, no-one really knew.

Barbados was simply perfect, a perfectly simple place to begin. The sound of water lapping softly on a sandy beach below a green-plastic tree on the wooden deck of an old inn brought a sense of universality to a first-ever Christmas without snow. Thoughts of being in Paradise were soon upon us: no boots, no parkas, no mitts; no windows, no insulation, no furnace. Why would anyone live anywhere else? For unemployed honeymooners, the day's big issue was deciding where to swim and where to eat when not consuming cocktails under the Banyan tree. Our first look at busloads of tourists disembarking from a large cruise ship helped drag our backwoods mentality into modern times: though aware of the concept, we had never before witnessed such a thing in real life. Several weeks later, a visit from our water-ski comrade and best man Ron Uruski brought reminder of our northern roots while applying a jet-age template to our sense of geography. This shrinking-distance factor was reinforced by chance meetings with occasional Air Canada pilots who considered themselves relatively close to home while enjoying their days off. One of them, Jack Desmarais, was already a hero of mine through his written work in *Canadian Aviation* magazine. An active line pilot with Air Canada who often reported on technical issues, he also entertained the aviation community with lighthearted essays about the greatest pilot of them all, *Ace McCool* and his hilarious airline archetypes at Down East International. "Come fly with us, Pete," he quipped; "we'll let you grow your side burns."

Probably more a factor of conditioning than genetics, many pilots such as myself tend to gravitate toward airport perimeter fences where we can "bird watch" to our hearts content without having to know exactly what is going on and without having to identify each sub-species. In the good old days, Seawell International Airport (BGI) at the island nation's south end was a fine locale for such pastime whenever the rigors of beach-bumming began to pale. The small open-air passenger terminal usually offered uncrowded facilities for the enjoyment of food and refreshment while watching first-generation jetliners doing their thing beneath the balcony railing: their auxiliary power units and air-conditioning packs were new sounds for me. Another preferred venue was on the airfield's south side beside the executive aircraft hangar where Barclay Bank's *Queen Air* and others hung out. The adjacent *Flying Club* was a modest but comfortable one-floor facility with windows wide open to the action; better yet, it was a full-service bar that was usually open and always welcomed visitors. It was here one afternoon that we "friendly locals" welcomed a newcomer from away. Flying his own PA-31 *Navajo* enroute to South America from his home near Detroit, Michigan, Bill Horvath was on the prowl for old or derelict airplanes to recover, rebuild, and resell. Having previously made a comfortable life for himself in the business of making concrete, he now needed something interesting to do that involved travelling without involving too many crowds. On this particular afternoon, the sun had dropped near enough to the yardarm of BGI Flying Club to allow friendly conversation and lively hangar flying around bottles of Banks and glasses of Mount Gay.

"By the way," said Bill, "I'm happy to give you honeymooners a lift over to Guyana if you like."

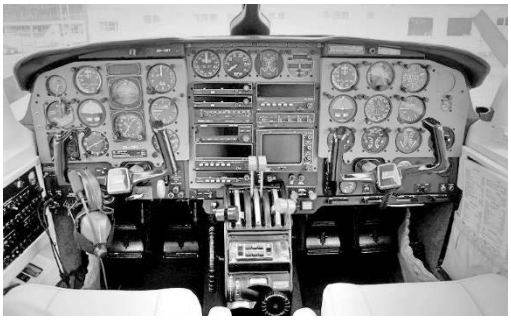
"Sounds good," we chorused. "How long before take-off?"

"A couple of days maybe; I want to check out some investment possibilities around here. What do you know about the local [economic] scene?"

So much for South America. Knowing little of anything else, my spirited response to Bill's last question centered on BGI's advantageous position and its lack of opportunism: handling VC-10s from Europe and DC-8s from North America, it is the international hub closest to a string of popular Windward Island resorts—from Grenada to Saint Lucia—without a suitable feeder airline to service them. In the bigger picture, Barbados is one of the few major airports between Trinidad and Puerto Rico offering access to the Lesser Antilles as a whole. Although BWIA (British West Indies Airline) and LIAT (Leeward Island Air Transport) were providing scheduled inter-island service, there was no reliable charter carrier to serve the smaller islands while simultaneously offering more flexible timetables. From all reports, the sole charter operator out of Seawell used an old Beech-18 that had difficulties with short fields and was prone to mechanical misfortune. "If you're looking for an off-shore investment with potential, you may want to consider creating a charter airline to fly out of Barbados."

"Yeah, but I would need a pilot," replied Bill without hesitation.

Next day, the three of us strapped into his bird *N9003Y* to check out some of the geographical territory while checking in on our collective sanity.



The Navajo was an instant treat to fly … light, fast, and responsive while easily capable of a six-passenger load. Almost new, it had state-of-the-art electronics for navigation and communication along with an auto-pilot and radar. Operating at about 6,000 pounds with 620 horses, the Navajo is slightly lower in weight and engine power than the C-45/Beech-18, but is a leaner, cleaner machine slightly faster in cruise and far more predictable close to the ground … a comfortable limousine in comparison to the old Bug Smasher delivery van. While similar in basic design, the Navajo has a split entry door with mini-airstairs into a more spacious cabin that includes a few basic passenger amenities. Bill's *Zero Three Yankee* was a PA-31-310—powered by two 310-hp., horizontally opposed six-cylinder, air-cooled, turbo-charged Lycoming engines. Our one-hour flights to/from Grenada proper (St. George's) provided brief looks at most of the Grenadines on the way in and out. After a day-off to collect his thoughts, Bill indicated his growing inclination toward the air charter venture by giving me a 45-minute check ride with a couple of engine failures. Done deal! Next day, Bill departed for home in N9003Y to reorganize his immediate future while leaving me responsible for setting up a corporate entity for our proposed operation.

So much for the honeymoon. From our humble abode on a local beach near the north end of Bridgetown, Sharon and I undertook endless forays into the city like a pair of upwardly mobile suburbanites. It was one thing to engage our imaginations in shared theoretical presentations of what we thought a successful charter airline might look like, or even how it might operate; but of course, it was something different again to define a plan and then put into play. Having never been party to a small business or other corporate reality, this process was our introductory course in Business Administration 101: terms and definitions were not always what we imagined, and often have slightly different meanings in different cultures. However, there was little fear of our application procedure going astray: the administration process for corporate registration and implementation was highly monitored along a tightly controlled track of governmental guidelines … education in its truest sense, historical and otherwise. Considerable time before the arrival of computers and collating printers, we were on the frontiers of Mimeograph and Xerox whereby meaningful business seemed to be conducted in triplicate with ball-point pen and carbon paper … often on upper floors of buildings without air conditioning and in the style of pseudo British colonialism where an air of sweaty realism evoked images from classic books and films with titles long forgotten. Although the going seemed slow at times, we managed good overall progress: having intense dedication and nothing else on our plates, we got the job done in a matter of weeks.

Authorized to offer chartered airline service from Seawell International Airport in County Christ Church, our newly created limited liability company would operate under the name **TROPICAIR.**

As the incorporating process grew more intense and more aviation specific, Sharon returned to the workforce as a school teacher for which she had been well trained. Her return to academia might also have been her retreat from unfamiliar territory and/or a search for sanity. Meantime, our ubiquitous-green-rented Mini-Moke pseudo-automobile would shuttle me around Bridgetown and out to BGI where our new paperwork had to meet the pavement … as in the concrete floor. Here, Ted Went became a good friend and a big help: from his Director's office in the terminal building, he would occasionally show me out to the back courtyard—a small field with a few targeted hay bales—where he introduced me to the art of archery while discussing life within and beyond aviation. The fact that he and his country's then-current Prime Minister (Errol Barrow) had trained together at CYSU Summerside during WWII may have encouraged his ready acceptance of my commercial licence capabilities. The fact that Sharon was now teaching at a school managed by Prime Minister Barrow's father suggested it was indeed a small world after all. Moreover, Ted advised that the other one-man air charter operator at the airport was a long-time friend of the Right Honourable Mr. Barrow. "Oh!" replied the new kid on the block.

From some storeroom stash probably known only to him, Director Ted produced a gorgeous-old, well preserved wooden countertop with a softly curving L-shape that fit perfectly into the main-floor terminal nook immediately outside his office … as if it may have been there once before. With sanding and oiling came telephone and stools; with patience and practice came an overhead *Tropicair* identification sign; with many more trips into unfamiliar territory came folding, four-colour *Tropicair* brochures that gave some life to our countertop kiosk which was situated on the main mezzanine of Seawell International Airport immediately opposite PAN AM (Pan American World Airways, as you may remember). We were in business! Thanks Ted.

By the time partner Bill and N9003Y returned from four weeks away, we had as much business as we could handle. Along with sporadic tourism requests, we had been contacted by two large corporations with international reach, Continental Telephone and Holiday Inns, both looking for what we had to offer: comfortable seating for four-six people and flexible scheduling to permit lay-overs and/or extended-day operations. Probably because we didn't know any better, our quoted fares were near bottom end of the spectrum … with the proviso that, while on duty, all our crew's food and accommodation expenses were covered by the customer. Ignorance is indeed genius. While Tropicair's principal owner-operator (Bill) was tending to other business, Chief Pilot Pete and *Zero Three Yankee* were soon bopping all around the eastern Caribbean with two semi-regular customers paying the bills. For non-school days and late afternoon sorties, Chief Flight Attendant Sharon would be onboard with a thermos of inflight refreshment from the terminal restaurant at BGI. Once airborne, Grenada, St. Vincent, and St. Lucia, were popular destinations about forty-five minutes west, while the islands of Trinidad and Tobago were about one hour south.

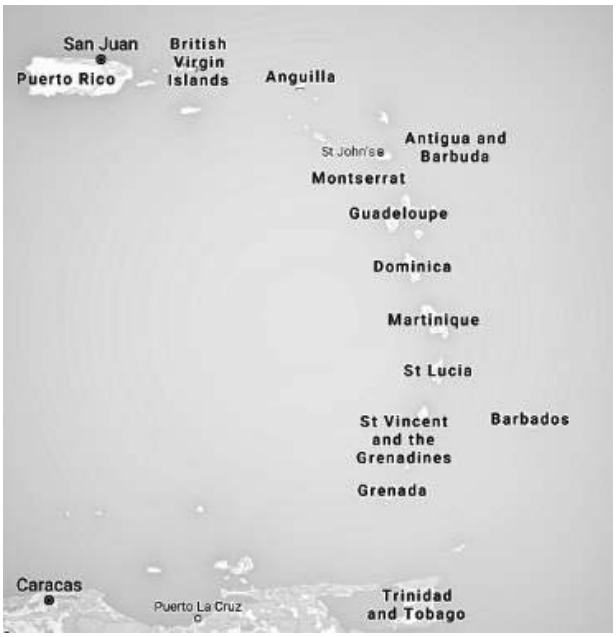
One multi-day mission with busy clients included several shuttles to newly discovered Vigie Beach on the northwest coast of St. Lucia as well as excursions to Fort de France on Martinique and to Pointe-a-Pitre on Guadeloupe where dinner at the Captain's Table on a cruise ship was included as part of our per diem agreement. A separate tourist charter took us to Beef Island, Tortola, in the British Virgin Islands for an almost seven-hour return flight. Another long venture took us on a night flight to San Juan, Puerto Rico, with a passenger before flying directly across the big black sea to Port of Spain, Trinidad, with a spare part for Pan Am. Fortunately, there were two people and a good autopilot in the cockpit for that eight-hour mission.

Back at home base, Bill and his lovely wife (whose name escaped my log book) rented a company house on the high bench above the fishing village of Oistins, about half way between Bridgetown and the airport. It was a delightful place—bright and airy, clean and dry—with modest furnishings all around. To take care of things, a wonderful neighbourhood woman would come by several days per week—often with fresh fish from the village below—to prepare dinner and do the laundry as well as some house cleaning. To knock the socks off our senses of reality, she charged $5 *per week* (USD). Before returning stateside, the Horvaths took us along in the Navajo for a weekend visit to Caracas, Venezuela that produced two persistent memories: traffic police with automatic weapons lining a major thoroughfare; and automobile drivers pounding on their outside door panels for attention while "merging" with sixteen lanes of traffic through un-signalled intersections—horn-honking was verboten.

During a subsequent multi-day break in the action, Sharon and I took my father Ed on a market-analysis mission during his brief holiday visit. Our primary target was Palm Island, a very small patch of sand in the Grenadines, where the resort owner was hoping to attract customers with a new landing strip for light airplanes. With appropriate arrangements being made, the three of us went to have a look. Fortunately, our host was sufficiently experienced in such things to have already moved his tall-masted sailing ship from the approach path of his new "runway" … a short and narrow slice of fairly level terrain amidst vegetated sand dunes and rocky outcrops surrounded by water. No sweat, it was nothing *Zero Three Yankee* couldn't handle. After landing, closer inspection revealed the runway under construction to be a surprisingly smooth mosaic of sod "bricks" being painstakingly transplanted by a team of local contractors. The true length of this abbreviated coast-to-coast landing strip can best be visualized by the short hour it takes to walk around the entire island in deep sand … it sure is a pretty little place.

Comfortably accommodated in a thatched-roof cabana on this battery-powered resort, we became comfortable with our hosts, John and Mary Caldwell, whose remarkable story gives meaning to the word epic while suggesting how legends are born. It began with John in a "borrowed" sailboat from San Diego, circa 1940, for a solo crossing of the South Pacific to Australia where he met beautiful Mary who became his wife. After decades of living at sea and circumnavigating the globe with their children in a larger sailboat, the senior Caldwells were now putting down roots in the sand. In a garden of bougainvillea under the rustle of palms opening to the sea, their hospitality and conversation was infectious.

Of course, next day's departure occurred later than originally planned—it was late morning and the air temperature was on the rise. Barely airborne at the upwind end of the new sod, the ground effect over the hot sand was truly uplifting … the immediately subsequent effect over the cooler water, much less so … the heart rate and the sink rate were going in opposite directions.



Less than eight weeks after our Tropicair flying adventure began, enthusiasm had already begun leaking away from its daily operation. Although the weather was becoming a bit fair-weather boring, the flying itself was nevertheless still fun; however, the administrative details surrounding it were often tedious and sometimes discouraging. While it was highly romantic to hop from one island paradise to another, the need to always undergo Customs and Immigration procedures was a drag; and for us country naifs, the semi-official custom of spreading palm-greasing *baksheesh* was always difficult to assimilate. Then, there was the uniformed official and his rifle re-adjusting my definition of daylight hours; and the pseudo-professional business traveler writing rubber checks. Back at BGI, there were indications of increasing pressure from government and industry that suggested advent of a more stringent business environment. TROPICAIR was a wild idea and a wonderful challenge, but somehow, I was now feeling that something was missing. As much fun as it had been, it was difficult to imagine making a career of it. With the tourist season winding down along with completion of our primary corporate contracts, it seemed like a good time to take a breath and call a break. Perhaps, something other than my sister's impending wedding in Toronto was calling me north. Maybe I was just a Canadian snowbird missing winter.

Footnotes and Postscripts

1. **Seawell Airport** is the original name for the only major airport in Barbados. In 1976, its regional designation was surrendered in favour of Grantley Adams International Airport to honour the nation's first premier. As well as name changes, many airports have also seen changes to their four-letter ICAO codes (International Civil Aviation Organization) and/or three-letter IATA codes (International Airline Transportation Association). As such, Barbados has gone from being ICAO *MKPB* to *TBPB* while maintaining IATA *BGI*.

2. **Palm Island Resort** of today is a modern, upscale version of Caldwells' original "beach club" which was sold in 1999. Although possibly the first aircraft to land there, we probably were not the last. While the runway is long-gone and over-grown, the little island is as beautiful as ever.

3. The **PA-31 Navajo** was first production type for multiple iterations that included pressurized and turbo-prop models. Manufactured 1967-1984, the Cheyenne, Chieftain, and Mojave are among 3,942 airframes built.

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The Fort

Although our four-month honeymoon in the Caribbean had morphed into a small aviation enterprise, neither Sharon nor I were one hundred percent certain that we would return after attending my sister Wendy's wedding in Toronto. Without compelling arguments either way, we shared an underlying sense of ambivalence, as though life might have something else in store besides the long-delayed pilot intake at Air Canada. While our leave-taking from Tropicair and our departure from Barbados were relatively graceful events, the return journey to our home and native land was decidedly less so: it was mid-April 1969 and Air Canada was on strike and out of service. Thus, a *BeeWee* 727 (BWI) got us to JFK New York where a helicopter and related bus shuttles got us to the departure gate at LGA La Guardia for an American Airlines connection. With golf clubs, typewriters, and other ancillaries, it was not a pretty picture; while helping unload a van-full of bags like any good crew member, my welcome to the Big Apple came from its driver: "My kids don't eat thank-yous!" Welcome to the real world, Peter. When not being brought up to speed with cosmopolitan culture, much of my journey was consumed by thoughts of the future, especially my aviation future as now influenced by partner Bill Horvath whose financial holdings included a wilderness fishing lodge in northern Manitoba with access to Mallard flying boats that could conceivably be integrated into our Caribbean operation. Bill seemed like a good man and a straight shooter whose promise of financial security for myself was accepted at face value. However, for reasons yet unknown, total commitment to that larger business dynamic was as difficult to accept as the picture of a lifetime at Tropicair. Upon our arrival at YYZ Toronto Malton, my father asked if I knew Jim Monteith.

"I don't think so. Is he related to my old chums [Andy, Steve, and Henry] back in Stratford?"

"I don't think so. He wants you to call him over at Kenting Aviation."

Situated on the north ramp of Toronto International, among a host of business, freight, and general aviation concerns, Kenting Aviation Limited was a well-established entity known primarily for comprehensive aerial photography and survey work in a variety of airplanes old and new. They had received an employment-search résumé during my waning RCAF career about nine months prior. "You have lots of multi-engine and tail-wheel time, Pete. How would you like to fly a B-17 *Flying Fortress*?" asked Jim Monteith (no relation to my old chums) over burgers and root beers at a small diner on Derry Road [still standing in 2014].

"Sure. What's the deal?" came my response while secretly wishing we were talking Lancaster.

"High-altitude photography in BC and Yukon. You'll need a commercial licence and an instrument rating. We'll match your air force salary plus pay expenses if you can handle the airplane."

Hmm … Never being much of a haggler, the offer of $30 per day, rain or shine, along with food and accommodation seemed like a pretty good deal, especially considering the $20-per-week salary that first got me into the business "… Okay, seems good to me."

So much for South America. So much for the honeymoon. Immediately following my sister's wedding, it was back to flying school for me. With necessary written exams already completed during the Air Canada application, a valid instrument rating was now needed for activation of the Canadian Airline Transport Pilot Licence: the training facility at nearby Toronto Buttonville Airport (CYKZ) was the place to go. Ah yes, back into the Link Trainer … dit, dah, daah, dah, dit. With two Link sessions and fifteen hours on the twin-engine PA-23 Piper *Apache* (CF-PSC), instructor Reg Reynolds got me up to speed for a successful instrument check ride with a Transport Canada examiner (Ron Leather). With a poorer weight-to-power ratio and a less sophisticated cockpit, the elderly PA-23 was a definite step backward from the Navajo; navigation-wise, it was a suitable time-warp transition back toward the basics of the older B-17. My performance was less than brilliant, but my new licence was as good as one could get—YZA1312. (The number may have indicated my relative seniority in the pipeline of ATPLs once issued through Toronto.)

Over at Kenting's hangar, a look at my next challenge, *CF-HBP*, inspired some research and a request for an operation manual of some type. For better or worse, the only available reference was a highly simplified flight manual, issued by USAAF (the Army-affiliated WWII forerunner to USAF) that didn't necessarily do justice to the complexity of the aircraft in question. Then again, too much knowledge might not have been a good thing for young airmen launching out of very short fields with too many tons of very high explosives on board. First flown in the mid-1930s, the Boeing-designed B-17 was developed as a four-engine heavy bomber for USAAC (the Air Corps predecessor of USAAF). Although the prototype crashed and burned because of pilot error (failure to remove flight-control gust locks), its performance theretofore was sufficient to initiate a long string of production models culminating with the "G" series that accounted for two-thirds of more than 12,000 units built. With thirteen machine guns and a crew of ten, the B-17 *Flying Fortress* became USAAF's most prolific bomber of WWII.

Although devoid of armament and operating with half the number of crewmembers, our new friend HBP was essentially the same G-model airplane.

For overall size appreciation, visualize a longer DC-3 with twice as many engines on a slightly longer wing. In more detailed comparison, the B-17's 103-foot wingspan is 10-feet more than that of a first generation B737 jetliner; and at 1400 square-feet, its wing area is 40% greater: for many years, the Flying Fort has also been known as the *Aluminum Overcast.* At 65,000 pounds, the B-17 is about half the weight of that B737 and almost 100,000 pounds lighter than a max-weight Argus. With four Wright R-1820 *Cyclone* nine-cylinder turbo-supercharged radial engines each putting out 1200 horsepower, our old bomber still had 10,000 fewer horses than the sub-hunter and it was 30 stampede-years behind the jet. Unlike these latter two examples, however, our WWII-vintage machine had a tail wheel similar to the DC-3 and would provide my first-ever experience with a *four-engine* tail-dragger.

So, why do some pilots like tail-draggers so much? There's no easy answer. Yes, the tail-dragger's nose-high attitude can be problematic on the ground with its reduced forward visibility and the constant need for S-turns when taxiing. Yes, on take-off, it does carry a grey-area transition zone before airspeed is sufficient to bring the tail into flying position. Yes, high-energy propeller torque is usually more pronounced without a steerable nose wheel. But no, there is nothing comparable to a fully stalled, three-point landing in the grass with a conventional-geared tail-dragger. However, because such rare and blessed events are more difficult to achieve safely and comfortably on larger aircraft, the most common procedure is to fly the airplane's main wheels onto the runway with a slight tail-down attitude at relatively slow airspeed while flight control inputs are still positive and highly predictable. These tail-down "wheelies" of heavier tail-draggers closely resemble standard landings of their tricycle-geared cousins. Although the wing-down-top-rudder crosswind technique is the same for both types, some pilots are convinced tail-wheel airplanes sideslip better while some others say they simply prefer their "ass in the grass."

Kenting's Neil Fuller supervised my check-out on HBP with several hours of aircraft handling that included numerous circuits and bumps as well several hours for testing our sensitive camera and ground sensing equipment up to 30,000 feet. By Summer Solstice, we were good to go. Joining me in the cockpit was Alan Warwick, a capable young co-pilot out of his family's flying service in southwestern Ontario. Along with a designated maintenance engineer, we would be operating the airplane in the service of Lockwood Survey who held the photo-survey contract. Their onboard point-man was Dave Edwards, an experienced navigator and camera operator who would coordinate the overall mission. Tag Pedersen, an equipment specialist from Lockwood, would be sharing responsibility for the camera and sensor on a mission designed to fill-in longstanding blank spots on Canada's geographical map while simultaneously updating the federal topographical database by pairing quality visual images with accurate elevation readings from a sophisticated radar altimetry device. Though not carrying bombs and bullets, our old bomber was heavily loaded with tanks of breathing oxygen, spare tires and engine parts along with our aero-engineer and his numerous containers filled with repair tools and maintenance fluids; also included in the stash was a healthy supply of film and graph paper for the survey geeks along with our personal gear. Similar to an Argus sub-hunter operation, we pilots would spend considerable time playing with nuts and bolts before we could dare attempt much understanding of the electronic gobbledegook behind us. Up front, there was no sign of an autopilot or weather radar anywhere.

Departing Toronto's Malton Airport on June 22nd 1969, we began our journey northwest with a three mile per minute cruise to Winnipeg where a recognizable voice and a familiar call-sign identified Bill Horvath and N9003Y enroute to their fishing lodge in northern Manitoba. Amid conflicting agendas, we managed a brief meeting on the terminal ramp at YWG from which—although the subject wasn't discussed—we both understood that Tropicair had seen the last of me. Subsequently, in the high-speed ramble of life, it was some time before I slowed down enough for a meaningful look behind, by which time there was no sign of Bill. I can only hope things worked out at Tropicair for him while praying my bright idea hadn't over-complicated his life too much. Thanks for your understanding, Bill.

With short overnights at Winnipeg and Edmonton, CF-HBP and its crew took me west of the Rockies and North of 60 for the first time. Suddenly, I was a young *chechako* being heartily impressed by Whitehorse and the Trail of '98 where wild scenery bubbles over with colourful history. Along with my first look at the spectacular topography of northern British Columbia and southern Yukon came introduction to the Whitehorse employees of Vancouver-based Canadian Pacific Air Lines (CP Air) who fondly referred to this regional route system as *BC District.*

For HBP and her crew, however, the most significant factor at the time was weather, more precisely the visibility: a large stable air mass over the region had concentrated smoke from a multitude of forest fires into one smoggy mixture thousands of feet thick with surface visibility often measured in fractions of a mile. After three failed attempts at the Richardson and Ogilvie Mountains, the decision was made to move camp—by redeploying to Prince George, we would address the next item on our summer agenda, the Coast Mountains of British Columbia. Unfortunately, in anticipation of another attempted photo mission out of Whitehorse, our airplane had been fully refueled before the relocation directive had arrived. As such, we were in a bind: with oxygen tanks, spare tires, tools and other parts loaded on board, we would be too heavy for a safe take-off; going anywhere without taking our gear would be as silly as sitting on the ground with a full load of fuel. Citing concerns of possible contamination, the FBO (Fixed Base Operator) refused to buy back, or even off-load, any of the 80/87 Avgas previously loaded. Fortunately, several ramp maintenance employees with CP Air volunteered to relieve us of our problem by relieving us of our surplus fuel, and they soon set to work with wobble pumps and 45-gallon drums.

Our Canada Day departure from CYXY Whitehorse was a pilot-oriented educational experience. In warm and stagnant air, our sturdy steed with the power of almost 5,000 horses could barely climb at 500 feet per minute while some voices within it sang praises to the fuel not taken; tracking through valleys of threatening terrain in zero visibility, my inner voice also gave thanks to Link Trainers and to the RCAF for basic education in the ancient art of flying radio range legs by audio signals alone … dit-dah-daaaaah-dah-dit. Hoping to see more of the Pacific-northwest, we flight-planned a southern route down the coast to Prince Rupert where we turned east over Terrace and Smithers on the way to Prince George. Unable to see anything of the earth's surface until landing at CYXS, we had our first look inside a west-coast weather system.

As soon as the weather permitted, we climbed back westward into our designated photo-survey area over the Coast Mountains where the rationale for our base in Prince George was immediately obvious: getting our big bomber in and out of those terrain-challenged airstrips—Smithers, Terrace, and Prince Rupert—could have been a challenge in any kind of weather; and any advantage gained by being close to the action would have been lost in the need to climb overhead in circles to reach our operating altitude. Instead, the long climb out from George allowed calibration of our camera and sensors over the upper Nechako lakes before arriving on task at the desired flight level. Life was simple. A sky with any significant amount of cloud cover kept us on the ground; lightly scattered clouds—around three-tenths—was often promising enough to send us out for a weather check; and whenever ideal conditions were encountered—one-tenth or less—we would get to work making hay while the sun was shining. For pilots, the job was pretty simple: keeping the old fort straight and level without an autopilot in the thin air of 30,000 feet while being awed by incredible vistas over an immensely vertical landscape. Breathing pure oxygen through tight-fitting face masks for hours at a time may have contributed to our heightened perceptions.

Among other things, the summer of '69 brought technological awareness to some of us who were hanging out in Prince George, British Columbia. From the far-out category came the televised image of Neil Armstrong taking *one small step* on the surface of our moon. Closer to home, some of us witnessed *a giant leap* in the world of aircraft technology when, after our shared weather briefing, the photo crew on the Learjet received take-off clearance before we got all four of our piston engines started. Hmm, perhaps these jet planes are here to stay. Later, over the Coast Range, we received another hit of reality when HBP's #4 engine was suddenly stricken with an incurable ailment and soon ceased to function altogether. Back on the ground in Prince George, we began looking for a replacement R1820 Wright *Cyclone* nine-cylinder air-cooled aero-engine, a once common commodity that was becoming rarer by the day.

While awaiting arrival of our *new* engine from an overhaul facility in Miami, the unanticipated time-off encouraged my surrender to the attraction of a shiny-orange jellybean of a two-engine jet-plane parked in front of the YXS terminal building. An invitation from its captain (Don Allen) allowed for a cockpit inspection that introduced a whole new level of avionics technology in a well-designed work-space. A few days later, when my B-17 co-pilot (Al Warwick) advised of his impending employment interview at CP Air in Vancouver, he was respectfully advised to bring back an application form for this slightly older and more senior colleague who, in a few short weeks, had already seen enough of the district and enough of the B737 to become somewhat distracted from his pre-assigned slot on a now-delayed course for DC-9 first officers at another Canadian airline (the red and white one based in Montreal).

Meanwhile, in preparation for the engine-change procedure, we had to taxi HBP headfirst into a hangar barely wide enough to accommodate her wingspan. Alas, while proceeding inbound with great care and attention, the uncustomary weight of this alien craft caused the hangar's gravel approach apron to suddenly develop a subterranean sink-hole into which sank her starboard MLG (right-side main landing gear) … down, down went the wheel … down, down toward the ground went the starboard wing tip … stopping within inches of disfiguring itself and within seconds of terminating our summer employment … whereupon, a steady stream of pinky-red 80/87 Avgas began pouring from the down-wing fuel tanks' air vents while orangey-white lightning flashes began erupting from blacky-blue mountains of burgeoning cloud in a suddenly ominous sky … *snap, crackle, and pour* went the soundtrack. With foresight and fortitude, the hangar crew of the local regional carrier came to the rescue with hydraulic jacks to help return us to a more respectable attitude before any lightning struck the scene dead … or otherwise illuminated this novel technique for removing surplus fuel, a method theretofore untested even by the defuelers of Whitehorse.

By early September, we had accomplished all that was expected over the west coast. It wasn't easy, however, because HBP was experiencing difficulty reaching the desired altitude of 30,000 feet: more and more often, we had to repeatedly level off, accelerate and then "zoom" climb several hundred feet at a time until reaching our desired level. Perhaps the old girl was showing her age and/or we were becoming reluctant to push her. In any case, an aircraft's service ceiling is simply an operational fact of life and the edge of an operating envelope is not always clearly defined.

By the time we pulled up stakes and headed to Winnipeg for another photo-area of interest, co-pilot Warwick had jumped ship for his new flying job at CP Air in Vancouver; and he was replaced by Barry Gray who had very recently survived a serious accident in a *Canso* flying-boat while water-bombing forest fires in northern Saskatchewan. On the job in southern Manitoba, our second photo-survey mission was cut short by exceedingly high oil temperature indications in HBP's "new" #4 engine. During the ensuing repair delays, a telephone call from head office suggested I directly confront our engineer regarding the correctness of his oil cooler installation. My reluctance to do so probably stems from air force training and Argus-squadron conditioning: maintenance issues are best left to the maintenance department. I stayed out of the experts' way. Sorry guys, reasonably good pilots are not necessarily good employees. [Ain't that the truth!]

Instead, after one brief, successful test flight, we packed up our gear and headed home to Toronto with dear old CF-HBP while she was still serviceable. Not for long. Soon after reaching cruise altitude, good-old bad-old #4 engine failed on us again. Given that three engines have fifty percent more power than two engines, and given our considerable experience at flying around with less than four, we elected to continue our flight to destination while reporting our condition to ATC. No sweat: the flight home was otherwise uneventful … so much so that the sight of flashing red lights and emergency vehicles attending our arrival was a total surprise. It was also probably of surprise to our employers in the hangar adjacent to the threshold of Runway 15 at CYYZ Malton. Several days later, after unknown attention to her engines, B-17G *Flying Fortress* CF-HBP proved herself capable of attaining an altitude of 30,000 feet without undue duress. Some of us on board were but mildly interested. One of us had something entirely different on his mind.

Footnotes and Postscripts

1. **Tropicair** seems to have survived for some time in one form or another (as one word or two). Fate of our original one-word edition remains unknown, though there is record of a Tropic Air operating for several years in Barbados during the early 1980s. Current references point toward Tropic Air in Belize which began as one-man operation and now operates a fleet of nine Cessna 208B Grand Caravans.

2. **Navajo N9003Y,** as reported by NTSB, was under different ownership when it made a wheels-up forced landing in Florida after failure of both engines—without injury to its crew (1983).

3. Prior to 1969, our *Flying Fortress* **CF-HBP** had distinguished herself on numerous photographic survey missions over the Arctic and Antarctic regions as well as over several continents in between. Soon after completion of our story, she reverted to U.S. registration and was converted to a water-bomber/tanker for fighting forest fires. She is currently undergoing restoration and refit back to her former *City of Savannah* WWII livery as a static display item for an air force museum in the state of Georgia.

4. Sadly in 1987, former B-17 co-pilot **Alan Warwick** died in the crash of a private aircraft near his home in Guelph, Ontario, eighteen short years after he had joined CP Air.

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The Twin Comanche

Very soon after the keys of CF-HBP were metaphorically handed-in to Kenting Aviation, an orange-coloured DC-8, *Empress 81,* carried me to Vancouver for a job interview at CP Air. By then, 150 hours of B-17 time and 75 hours of Navajo time along with some Apache instructional time had brought my log book up to the 4,000-hour mark: the year had been far more interesting than expected since leaving the air force. Now, from the City of Richmond's inimitable Skyline Hotel on Lulu Island, the then-iconic Middle Arm swing-bridge led to Sea Island and to a longstanding hangar complex on the south side of Vancouver International Airport where Canadian Pacific Airlines (CP Air) offered me employment on November 19, 1969. Immediately thereafter, three evaluation flights by instructor John McNee in DC-3 #177 (CF-CRZ) ushered our intake of newly hired airplane drivers into ground school for a preliminary B737 course for the purpose of learning "Boeing-speak" before undertaking more comprehensive training on its three-engine B727. After successful completion of that ground school course and its associated simulator sessions at Boeing Field in Seattle (BFI), a series of instructor-supervised line flights had us back in the air as certified Second Officers (thank you, Murray Neilson). Often known to others as Flight Engineers, we were known amongst ourselves as Oilers. Although we had no window to look through and no control column to play with, we were just happy to be "sitting sideways" on one of finest airplanes ever flown by man, the Boeing 727 tri-jet. It was fun while it lasted …

Within a year of becoming line assigned, many of us new second officers were back on the street —laid off. It seems an anticipated growth in route structure did not materialize under terms of a recent bilateral air agreement with the United States; and as such, CP Air had a few more planes and a few dozen more pilots than necessary. Presumably, there would have been some prior understanding before any carrier invested many millions of dollars toward imaginary expansion; rumours of the day, however, strongly suggested there had been last minute revisions to the master plan; and given the government-industry dynamic of the times, it was not difficult to visualize a "pissing contest" between Canadian Pacific's Chairman Ian Sinclair and Ottawa's Minister of Transport Jean Marchand. In any case, the healthiest pieces of the pie seemed to have been shared between US carriers and another airline in Canada. Meantime, at the orange airline out west, all recent new-hires beginning with myself and extending downward through several subsequent intakes were given letters from management declaring us to be *surplus to their requirements.*

For the second time in three years, résumés and telephone calls were scattered far and wide in search of any employment opportunities in the aviation sector. Some of us were lucky. Course-mate and hockey line-mate Garth Irvine was able to join me for a successful interview with Winnipeg's Midwest Airlines which was seeking experienced pilots for its summer contract to conduct forest-fire patrols in northern Manitoba. Accompanied by an assigned spotter/plotter, we would each fly a PA-30 *Twin Comanche* from bases in Thompson and/or Flin Flon under direction of a Forest Service representative. In warm coincidence, Midwest's Chief Pilot who interviewed us was Mike Lynch, a former RCAF pilot who had been my supervisor on the C-45 during my brief sojourn at Winnipeg's Air Navigation School back in 1964. Seven years later, his two-hour check-out declared me fit for duty on the PA-30 Twin Comanche.

Developed from its single-engine Comanche parent, the PA-30 Twin Comanche is lighter, cleaner, and faster than its older brother Apache, but nowhere near as large and comfortable as its younger brother Navajo … the sports car to the limo. Smaller all around and about half Navajo's weight, the 3,700-pound Twin Comanche can carry four people and a bit of baggage or six small people and no baggage. Two 160-hp Avco Lycoming horizontally opposed 4-cylinder engines push the speedometer to 180 knots (200 mph), and its 120-gallon fuel load is good for 1,000 nautical miles (1,200 statute). For torque mitigation, its propellers rotate in opposite directions.

On June 2nd 1971, crewmate Fred Redfern joined me for the 2:45 positioning flight to CYTH Thompson in aircraft CF-PNX while Dave Abrahams joined Garth in CF-YMQ. Established in the mid-1950s at the site of a major ore deposit, and named for the then-chairman of Inco (International Nickel Company), Thompson was easy to find with its very large smokestack rising above its nickel smelter. Although not yet busy enough to warrant a full-time control tower, this geographically remote airport, 450 miles from Winnipeg, already sported an ILS approach to a 5,000-foot paved runway supporting regularly scheduled service by Transair. With upwards of 10,000 souls, the "hub of the north" town-site offered a reasonable selection of all amenities required by man. The nearby Burntwood River flows northeast to Split Lake where it joins the Nelson River which continues northeast for another 150 miles to Hudson Bay. On the way there, the town-site of Gillam had recently sprung up in support of extensive hydroelectric development envisioned for this mighty waterway that channels all of the Saskatchewan and Red river systems. As well as one road running through a maze of rivers and lakes, the tracks of Hudson Bay Railway are seen stretching 1,000 miles from Winnipeg to Fort Churchill … at the mouth of yet another grand river 150 miles farther north.

Beginning the day after arrival and for most days thereafter during the entire summer, Garth and myself were on the job, each flying separate predetermined tracks through defined areas while on the lookout for smoke columns and/or fires large and small that would be immediately plotted and reported. Most patrols were 2:00-2:30 in length, and almost every day we flew two of them; although one-patrol and three-patrol days were not uncommon, zero-patrol days-off were definitely very rare. Our boss "Smokey"—of the Department of Mines, Resources, and Environmental Management—had a distinctly more critical appreciation of current forest-fire threats (or perhaps good old budget graphs). In any case, he kept the aircrews out of trouble by ensuring there was insufficient time and energy for wandering far beyond small-town motel-style accommodations. Although the flying itself was often boring, the variety of route structures did provide scenic history for any fur-trade aficionado: becoming somewhat familiar with Churchill River, Nelson River, Hayes River, Norway House, Split Lake, Cross Lake, Mystery Lake, and Oxford House, it was educational to visualize huge armadas of fur-laden canoes drifting downstream and small convoys of York boats pulling earnestly upstream.

By Canada Day 1971, the forces of nature and the powers-that-be had seen both our crews redeployed to CYFO Flin Flon that also sported a 5,000-foot paved runway and regularly scheduled air service. Founded in the late 1920s around a major deposit of copper and zinc, the town takes its name from *Flintabbatey Flonatin* a fictional character in literature that was known to discoverer of the mine who left his own name on the suburb of Creighton, at the west end of town … in Saskatchewan. Although Flin Flon is significantly smaller than Thompson with fewer amenities, the surrounding area has a more interesting mix of Shield-country rocks and water. Based here for the month of July, occasional test flights and parts-delivery missions provided brief looks at CYQD The Pas and CYNE Norway House. While flying daily patrols around Grand Rapids, Cranberry Portage, Lake Athapapuskow, Leaf Rapids, Bakers Narrows, and Pukatawagan, it was an easy stretch to visualize Mackenzie and Thompson paddling west.

By early August, the forces of nature and the powers-that-be had us transfer back to Thompson where we resumed our daily rituals … that occasionally included formation flying. Yes, to help transcend boredom, Garth and I would often briefly practice our formation-flying skills before splitting off to our individual route assignments; a two-plane formation also added a bit of spice to otherwise mundane repositioning flights. One particular day, having been assigned flying areas in totally opposite directions from the airport, it was impossible to *reasonably* justify any formation practice; however, with a runway twice as long as we needed and with its entry taxiway at the midpoint, we taxied out in formation onto the runway, then turned in opposite directions and took off, away from each other, toward opposite ends of the big runway. That would have been end of story, but for the Transair B737 crew parked on the terminal ramp. By the time the story reached Chief Pilot Lynch down in Winnipeg, our Twin Comanches had taken off toward each other from opposite ends of the same runway [next time maybe]. The resultant telephone call from our boss also pointed out that our dress and personal deportment was reported to be sub-standard: so much for cowboy boots, blue jeans and facial beards. Previously unaware of employee-related tensions between Midwest and its parent Transair, we had perhaps been a little too cavalier. Ironically, no-one in either airline knew we would all be working for the same airline in the not-too-distant future.

The formation story did not end there. On August 31st, after another full month on the job, we gathered up our gear and called it a season, heading back south to Winnipeg with our respective crewmates and respective airplanes. Lo and behold, about half way home, Garth's airplane suffered a total loss of communications: electrics seemed fine, but he couldn't hear or be heard. [This is a true story!] With a wave and appropriate hand signals, Garth was soon in formation. "Winnipeg Tower … Twin Comanche Yankee Romeo Victor plus one Nordo (no radio), twenty north, inbound VFR … request landing instructions." After landing in formation on Runway 18, we were cleared to taxi in formation via the main terminal ramp. We were chuckling to ourselves pretty heartily by the time we shut down on the ramp at Midwest where our boss appeared to be somewhat mildly [barely] amused … maybe. Anyway, that was the end of that. Heading back to the west coast, there were 242:00 hours of PA-30 time in the book. Thanks Mike.

16

The 727

As well as introducing me to a different airplane and to interesting geography, the laid-off summer of 1971 had also provided a look at unexpected options in my aspiring airline career. Immediately after the keys of my Twin Comanche were metaphorically handed-in to Midwest Airlines, an orange-coloured jet plane carried me to Vancouver for a job interview at Coral Cabs in Richmond—behind the Skyline Hotel by the old swing bridge, if you remember. The next entry in my log book was for a 1969 Chevrolet known as *Car 62*—nothing to write home about, the "sorta-regular" income was welcome addition to the family budget which relied heavily on partner Sharon's earnings from teaching at a small elementary school in Surrey. My earliest cab-driving memory was educational: to quiet me from complaining during an over-extended wait period, a fisherman came out of the processing plant in Steveston Village and plunked a fresh salmon into the trunk of Car 62. Welcome to the west coast. The worst days on the job were often the wet-snowy ones (yes indeed!) wherein we never got farther than a couple of blocks from the shopping mall while hucking endless bags of groceries up narrow staircases for little old ladies who didn't tip. (Once a Boy Scout, always a Boy Scout.) My best day driving hack was mostly occupied by an extensive tour of Greater Vancouver for a middle-aged couple making the best of their time between connecting flights at YVR. Generally, in the light of day, the taxi-driving experience was a wonderful way to improve car-handling skills while learning how to better navigate the city; below the surface in the pre-dawn darkness, however, it also brought us face to face with competitive humanity as we learned to play the game by jockeying for position on the call board.

There is nothing like a lay-off to improve appreciation for one's primary vocation. It may not necessarily improve appreciation for one's employers, but it certainly does revitalize one's commitment to the chosen profession. A fortunate few of us were called back to CP Air in late January 1972 when two sessions in the fixed-base cockpit trainer and one hour in the real airplane brought us back up to speed. A two-day line flight through Montreal under the watchful eye of Check S/O Norm MacSween, a more senior (older) original course-mate who had escaped the lay-off—had me reconditioned and re-qualified to operate as a Second Officer (oiler) on the B727.

First flown in the early 1960s, Boeing's 727 was a short-medium-range jet transport that retained the cabin circumference of its four-engine 707 predecessor while incorporating integral air stairs in the aft fuselage and a self-contained Auxiliary Power Unit (APU) in the main wheel well. With all three engines mounted in the tail section, the well-swept-back wings were free to incorporate full-length leading-edge flaps and slats as well as triple-slotted trailing edge flaps. With speed brake panels then deploying from its upper surface, the design became commonly known as the "disintegrating wing." Yes, it was a cutting-edge advancement from the round-fat wings of the piston era; and yes, it did contribute a bad-rap for the airplane in its earliest days. In the end, however, aviators far and wide came to appreciate this high-performance wing as a marvelous tool.

With three 14,500-lb-thrust Pratt and Whitney JT8D-9 engines pushing from behind, and with solid, responsive controls up front, the B727-100 was widely recognized as a "pilots' airplane." With cruise speeds as high as Mach .84 (555 knots/640 mph) it was the fastest commercial jet available (SSTs notwithstanding). Moreover, at moderate airspeeds, the 727's flight deck was almost as quiet a work space as the extremely quiet First-Class cabin. Measuring 133 feet in length, our original four 100-series airplanes carried 106 people in two-class configuration and up to 125 in charter mode; with about 52,000 pounds of fuel (7,680 US gallons) and maximum payload, the 727-100 weighs in at 169,000 pounds with an operating range of 2,200 nautical miles. Our two subsequent 200-series airplanes carried 30 more people with 20 more feet of fuselage and more powerful -17 engines; with a ton more fuel and tons more payload, they weighed in at 209,000 pounds while capable of similar range and speed. Both about 34 feet in height, they share the same 108-foot wingspan (15% more length and area as the B-17). Of flight-safety interest, the 727's fuel dump chutes are located at the tips of their highly swept wings … aft and behind the engine intakes.

Although a cockpit seat with a window is our natural preference, we oilers had our own particular cachet along with our own office and instrument panel containing a comprehensive display of aircraft parameters as well as control for all aircraft sub-systems, helped by a library of maintenance reference manuals. Previous experience in three-man cockpits helped some of us be comfortable with our flight engineer role—taking care of details while our comrades flew the airplane. As well as doing external aircraft inspections prior to every departure and most communications with Base Ops and maintenance, we coordinated the paperwork to obtain our desired fuel load while also completing the ever-vital data-card which presents the critical reference speeds for each take-off (V1, Vr, V2) according to current conditions of weight and temperature. From start-up to shut-down, the Second Officer reads out and monitors the actions for all checklists while maintaining responsibility for all sub-systems—fuel, electric, hydraulic, air conditioning, and pressurization.

Although the forward pilots have command authority, the oiler in the back seat is often the only crewmember able to reach the necessary controls for remediation of technical faults … while sometimes also having the biggest-picture view of events. On rare occasions when something "bad" does happen, he is usually the man of the moment for damage control.

My first "bad" moment on the 727 had occurred soon after becoming line-qualified the first time around … back in the previous year. As a relatively junior oiler on the standby/reserve list, luck of the draw assigned me to a two-day flight pairing with two very senior pilots—Captain Jim Radford, VP Flight Operations, and Captain Cle Lamb, Manager Flight Operations. All went well until the undercarriage was selected up after take-off from Vancouver … an abnormal UP indication created some doubt about gear position followed by a DOWN selection and a request for the S/O to ascertain gear position by looking through the appropriate viewing ports. Yes sir, I'm on it! Out the door I went knowing the nose-gear viewer is beneath the aisle carpet marked by the first silver button aft of the cockpit door … oops, no button to be seen … oops, nor was a button to be seen on the carpet hiding the main gear viewers back near the over-wing exits … oops. Never having memorized the exact row numbers for such things, I had been caught by my own short cut to academic excellence. Back I went to the office for a quick look at the manuals. Never having memorized the exact chapter for such things, I became a frantic paper-flicker. Of course, there is no easy index reference leading to wheels and carpets; nor is there a *missing silver buttons* emergency checklist. My experienced colleagues could be of little assistance: they hadn't thought about such things since completing the ground-school course years before me; besides which, they were busy flying the airplane and communicating with ATC and the company. While back ripping-up one section of carpet among several, an older woman placed a hand on my arm and asked if I was the Captain. In response to my explanation, she exclaimed "Thank God, you look too young."

She certainly had that age thing right. Being "man of the moment" is open to interpretation and is seldom what idealistic youngsters have in mind. So much for damage control. Thanks go to my esteemed colleagues for enduring my awkwardness and for patiently awaiting satisfactory end to the dramatics inspired by such a miniscule problem. Though this flight pairing concluded without further mishap, it is most probably one factor, among several, for my being the most senior pilot to have been laid-off that year … surplus to company requirements.

Although re-assignment to regular line duty early the following year had proceeded without technical difficulty, unforeseen administrative hurdles had confronted two pilots returning from lay-off. It seems the people in CP Air management were not as fond of facial hair as those of us who had cultivated full beards while chasing forest fires and driving taxis: although there existed no rule in the book prohibiting beards, the powers-that-be wanted them gone. When Garth and I demurred, they brought in the company doctor who declared beards a flight safety hazard by their interference with the oxygen mask facial-seal. Although beard owners might reasonably argue the opposite effect, we shaved our faces to keep our jobs. My subsequent suggestion that this flight safety issue be raised with Air France, British, Alitalia, and the numerous other carriers that fly around the world with bearded pilots, was never acted upon: it seems facial hair was only unsafe for North American airlines. [NB: Air Canada pilots are now allowed to wear beards.]

Lively dialogue with management continued on a different subject: it seems our nine-month lay-off was being treated as a voluntary leave of absence and our dates-of-hire were being post-dated nine months later in accordance. Coming as some surprise to administrators, my cry of "foul ball" was based on the fact that our lay-off was company business being done at its request, saving it money while retaining us at its bid and call. The company's decision to respect this point by maintaining our original dates of hire was of lasting consequence: seniority and length of service would become bottom-line determinants in a long series of merger negotiations yet to be imagined.

In due course, the paperwork settled into place as we returnees settled back into our centre seats where some of us found renewed commitment despite, or because of, the previous year's discombobulation. I can remember easing up on my lust for a window seat and becoming more content with my assigned role, enjoying the job and doing it as well as possible. Being a responsible third set of eyes (and ears) in the cockpit was always satisfying, especially in high-traffic terminal areas. In cruise mode, when not recording instrument readings or copying weather reports, most second officers readily accepted another less official task—using the cockpit door peep-hole to determine the appropriate time for opening the door and entering the forward galley area … while flight attendants were beginning to prepare coffee and dessert service, a politely adept S/O could help clear galley space by ushering an aisle-cart of leftovers onto the flight deck. Ah yes, those were the tasty days of Coquille St. Jacques, Carre d'aigneau, and Gateau Saint Honoré. Magnifique! "Can I get you guys a cup of coffee while I'm up?"

For the most part, life on the job was easy to take. While waiting for seniority to offer a window seat, most oilers on the 727 were happy being part of a highly professional crew operating one of the finest airplanes ever flown by man. Our systems panel was simple and straightforward, and our captains were a wonderfully eclectic batch of former propeller-heads, some of them dating back to WWII. In fact, we are all so old now that this confession should not cause collateral damage: contrary to government regulations and company procedures at the time, several B727 captains would occasionally allow some of their second officers to fly the airplane from the first officer's seat; in fact, in some situations, we were permitted to operate one complete flight sector from take-off through landing. Whatever motivated our captains' benevolence beyond sympathy for their colleagues remains unknown. However, the joy it brought was immense. Not only did we feel more integrated with the crew, but we also increased our appreciation for the machine many times over. Although never on my licence or ever flown legally, the B727 is on my list of favourite four airplanes ever flown. Unfortunately for us selfish-minded pilots, advancing technology and escalating wages gradually phased out the 727 in favour of more automated two-pilot cockpits. In the interim, the "three-holer" remained a very desirable piece of equipment at CP Air; such that, by the time my seniority finally permitted a look-see at the right seat, they had all gone to market. There is no regretting the three years of oiling on the B727-100 or the 1861:15 in the Second Pilot columns. I am truly happy to have been part of it.

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The 737

In February 1974, after two years as Second Officer on Boeing's 727 tri-jet, slowly advancing seniority finally offered my promotion to a window seat on CP Air's smaller B737 twin-jet. With thanks to a company policy that had maintained our Class II instrument ratings on the DC-3 while allowing unlimited voluntary sessions in the 737 flight simulator, transition forward from the oiler's desk was a smooth procedure for all returnees. Another ground school course and another round of simulator exercises preceded aircraft handling sessions that saw us flying over to Calgary for midnight pilot training exercises at a less busy airport with better weather conditions. Naturally, these flights were mostly about circuits and bumps with touch and go landings followed by engine failures. If you can do it in the dark, you can do it anytime was the accepted rationale … more importantly, that's when the training plane was available. Thanks go to instructor Captains Stan Burns and Ron McNeilly for their expertise at aircraft introduction. An IFR instrument rating test ride with MOT examiner Sid Quickfall (no, not that bad) concluded our upgrade process and sent us back to the line as qualified First Officers on what would soon prove to be my favourite airplane of all time. As forecast, the B737-200 was indeed a highly reliable, high-performance hot-rod, and we newbies were about to discover what history has long-since confirmed.

Meantime comes this epiphany-like appreciation for a previously unknown and never scheduled element in the flight-training syllabus. Seated amidships, back at the over-wing area, while fellow course-mate Joseph (José) Florence took his turn at flying night-time touch and goes from the right seat of a B737, I began to correlate movements of leading and trailing edge flaps with my sense of proceedings in the cockpit and knowledgeable estimates of target airspeeds, adding in engine noise and some g-factor until a fair degree of situational awareness evolved. Almost like flying from the back seat, it was educational osmosis. The texture of the ensuing touchdown was inconsequential … just a punctuation mark separating two clauses in a very long sentence. Nevertheless, my forehead was often pressed against the passenger window as I monitored engine sounds and flap positions … all the while looking for the bubble. The bubble? Yes, the bubble.

Difficult to see at any time, it is well-nigh impossible in the darkness of a high-elevation airport; but, it does exist (more so than the Yeti) and is more commonly found around 727s than our 737 (or the -300 pictured). Although many of us can attest to its existence, very few pilots claim to have actually seen it; but those who do are unanimous in their description … never seen in the infield grass and most commonly found in summer, it's a *purple-coloured* bubble that migrates beneath aircraft wings in conditions of light winds. Just because it's impossible to spot at night doesn't mean it isn't there hiding behind the headlights, trapped by a descending semi-circle of mechanically activated metallic devices. Unable to escape the claws of aluminum flaps, it defends itself by compressing itself into a highly pressured nerf-ball that resists advances by the underwing surface … and thereby alters expectations of the bird watchers above. The stand-off ends in a matter of seconds, as quickly as it began. All too often, the natural landing-mode tendency to increase back pressure on the control column causes the main wheels to slide off the back of the bubble with a recognizable THUD. More often, when confronted by a mature bubble, the unnatural tendency works best … relaxing back pressure on the control column lets the nose fall ever so slightly and allows the bubble to escape, spilling out beneath the trailing edge flaps and facilitating a more tempered descent of the wing and wheels. Yes, sometimes, a little forward pressure on the controls is desirable. While the seldom-seen bubble most commonly resides under wings of the B727 (pictured), belief in its existence enhances the experience of all bird watchers.

Suffice to say there was/is no other aircraft quite like the B737-200—able to carry 110 people nonstop from Montreal to Vancouver and then fly them safely into the slippery confines of Terrace BC on that same dark and stormy night. Aviation history may never identify another such airplane. Aircraft design was a major factor in this success, and foremost among design assets was the onboard Auxiliary Power Unit (APU) that supplied self-generated air pressure for starting engines without the need for ground-based equipment and handlers. With or without engines running, the APU could also take care of electricity and air-conditioning concerns on the ground … and in the air when necessary. Of similar value were the *clamshell* thrust reversers attached to the rear end of each JT8D engine; without their extremely efficient braking power, operations would have been severely restricted at many airports at any time of year. Another important on-board asset was the self-contained electrically operated air-stair at the forward passenger door that permitted aircraft access and egress independent of ground equipment and handlers. Moreover, general design and operation of aircraft systems—fuel, electric, air-conditioning, hydraulics—were straightforward and easy to use, so much so that every Boeing airplane since has adhered closely to the overall concept. Having been in service since the late 1960s, our B737-200 series was a small, narrow-body workhorse with a length of 100 feet and a wingspan of 93 feet (10 less than the old B-17). Powered by two Pratt & Whitney JT8D-17 engines with 16,000 pounds of thrust each, our most advanced model weighed in at 128,000 pounds while carrying 34,000 pounds (5,000 US gallons) of fuel. Having a maximum speed barely equivalent to the B727 cruise speed, the slower cruising (M.74) B737 is a two-engine Jeep to that three-engine Jaguar.

The first line flight for many newbie 737 pilots began with a zero-dark-hundred wake-up call for a near-dawn departure from Vancouver on the flight pairing known as 40/41. Interestingly, despite the use of ancient hand-held microphones and that days' surfeit of paperwork, the two pilots could usually devour one breakfast each during that pairing's first leg, a busy-enough one-hour hop into Prince George (YXS). As always, well deserved gratitude and kudos go to three flight attendants who always managed to supply the monkeys in the nose-cone while tending to a hundred or more souls in the cabin. Methinks those were the good-old days when efficiency and productivity referred to something other than profit margin. In any case, the short flight sectors and compressed time-lines of CP Air's northern "bush division" could not help but encourage high levels of crew cooperation while accelerating the learning process. We soon realized that our team of on-board professionals was but one small component in a surprisingly large and complex regional system being smoothly operated by a team of highly skilled aviation specialists—*BC District.*

When *Empress 40* stopped in front of the Prince George terminal building, a welcoming voice on our ground interphone advised the wheel chocks in place and gave clearance to release our parking brakes (for cooling). Inbound passenger-customers were deplaned and outbound passenger-customers were emplaned while cockpit checklists and log books were completed in sequence with a mandatory walk-around safety check of the aircraft exterior, usually accomplished amid consultations with the on-duty maintenance chief, his baggage handlers and/or with the independent FBO fuelling our airplane; with good timing, walk-around inspections could include collection of the fuel slip as well as a visit to Base Ops for the latest weather reports and a look at our all-important weight-and-balance load sheet. Back in those days, some people also managed a quick cigarette when far enough away from the gas pumps. The pilot remaining onboard (often but not always the Captain) would inhale breakfast if not already consumed on route, and would monitor the radios while coordinating information flow with his cabin crew. Meanwhile, the calm efficiency demonstrated by all ground support staff was impressive … and infectious. Fifteen minutes after arrival brake-release it was time to reset them: "Roger, thanks, brakes set, turning number two …."

And, so it went: forty minutes later we were in Fort St. John, more officially Fort St. John / Dawson Creek (CYXJ), for another routinely quick turnaround preceding a 30-minute hop into Grande Prairie Alberta (YQU) where another routinely really quick turnaround initiated the 45-minute flight segment into Edmonton International (YEG) where we would enjoy a "lengthy" 40-minute pit stop before bouncing back the way we had come, now known as *Empress 31.* As always, YQU was short and sweet with little to report beyond fast and friendly service; however, further experience with the unpredictable winds of that prairie environment would prove its two short runways to be better than one. Arriving back at YXJ in early afternoon, we became part of a three-plane formation of orange 737s occupying a barely-big-enough parking apron in front of a too-small-looking terminal building. While three was the daily norm, it was not unusual to see four 37s together here during peak travel periods. There is something special about multi-plane formations … on the ground or in the air; maybe it has something to do with digesting small accomplishments or marvelling at bigger pictures; wherever it comes from, some intangible spirit fires pride and passion into aviators inhaling JP1 fuel fumes while surrounded by metallic monsters screaming their throaty chorus of APU exhaust.

Fort St. John, the regional "centre of the BC District universe" takes on a decidedly different ambience during early morning pre-flight of our solitary 737 standing guard in the pre-dawn silence. Fire-up the APU, turn on the lights, turn up the heat, and make sure the coffee is brewing; the fine buzz of awakening flight instruments and the harsh crackle of radio static herald the beginnings of a new day. At 0630 hours, *Empress 42* launches from Fort St. John on a mirror image of our previous day's mission—after catching sunrise a few minutes later in Grande Prairie, we fly to Edmonton for a name change before heading back whence we came. With customary quick stops in Prairie, John, and George, *Empress 41* has us back home in Vancouver before noon. Okay, duty is done, now bring the body down and focus the mind on more earthly matters. Hmm, … YVR-YXS-YXJ-YQU-YEG-YQU-YXJ-YQU-YEG-YQU-YXJ-YXS-YVR in two (2) short days means ten (10) *more* landings and two (2) hours *less* pay/credit than the amount earned for one (1) good day on Transcon … hmm. Nevertheless, the call of the wild was irresistible, and bush division was the obvious place for anyone who regards the fun of flying airplanes as an irrefutable equal to the meaning of life.

Footnotes and Postscripts

1. The stocky-looking **B737-200** was also known by ATC as a FLUF—a Fat Little Ugly Flyer (or such).

2. With a total of 10 iterations continuously manufactured since 1967, **Boeing's 737** series is the best-selling jet airliner in the history of aviation. At time of this writing, 9,716 units have been delivered and 4,431 remain on order. Research analysis indicates that, on average, 1,250 Boeing 737s are airborne at any given time with two departing or landing somewhere every five seconds.

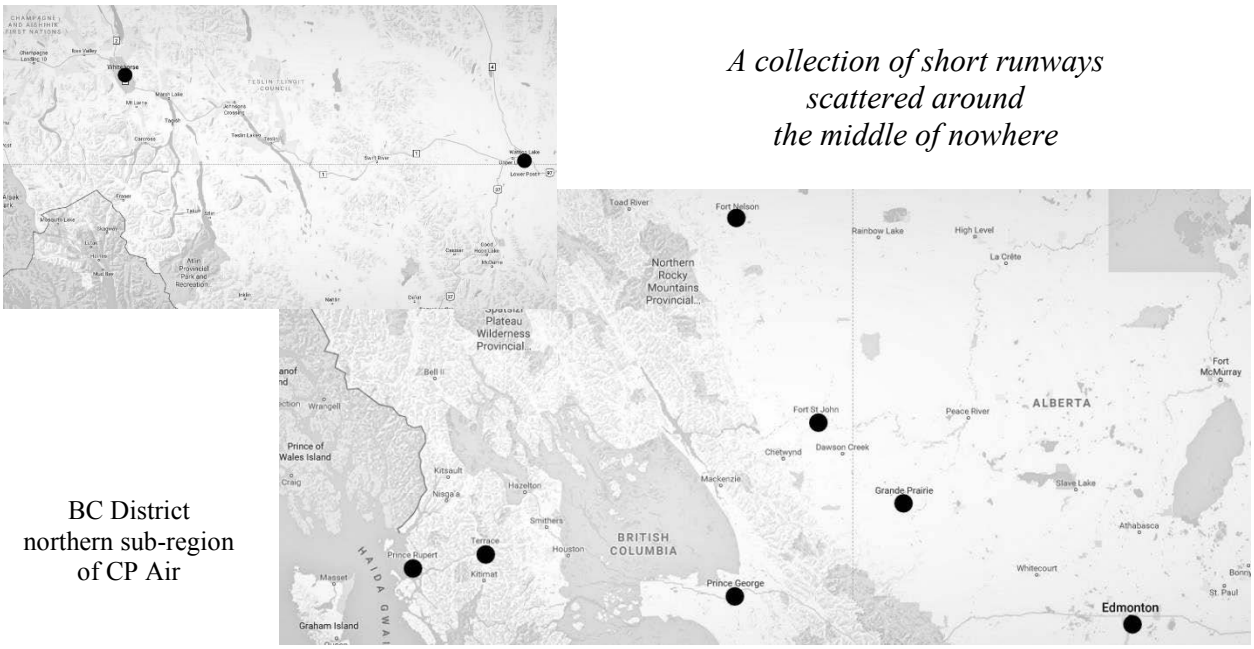
3. A long-held dream of **breaking the sound barrier** was realized in 1971 on an Air Cadet Familiarization flight in a CP Air DC-3 captained by Bob Pitcairn. After landing at YQQ Comox, we were ushered directly into the ground-training facility and introduced to the CF-101 *Voodoo* simulator, where soon after getting both throttles around the horn into afterburner, I was suddenly firing all my rockets while executing continuous "slow" rolls at supersonic speeds … 'twas not an old-slow airplane with large flight instruments.

4. Having played with base hockey teams in the air force, my hockey career progressed to a beer league in Richmond BC whence our Vancouver Seagulls went on to win CP Air's 1973 **Transcon Cup** in Montreal. The absolute highlight of my athletic career occurred the next morning when, in the depths of celebratory hangover, we defeated the Air Canada "All Stars" 1–0 in an exhibition game—on Garth Irvine's winning goal and my absolute all-time favourite hockey assist … near as I can remember.

18

The District

A collection of short runways scattered around the middle of nowhere



BC District
northern sub-region
of CP Air

Closer inspection and hands-on experience soon refines simplistic first impressions into a working database of important information: research found many of BC District's airports to be at aircraft performance-limiting higher elevations; and a hands-on approach found several of them to be seriously surrounded by operationally restrictive terrain. Another overly simplified but reasonably accurate description—v*ariable across a broad spectrum of possibility*—refers to the region's prevailing weather conditions which, by occupational necessity and the need for philosophical acceptance, are translated into a workable format—endless streams of unattractive weather reports are soon regarded as *seasonally normal* facts of life. Although references to rain intensity, snow depths, ice accretions, and braking-action JBIs are beyond the scope of this report, imaginative readers can fill-in many of the weather-related blank spaces by insertion of worst-case scenarios.

When improved seniority and familiarity with the monthly bidding system allowed, newbie 737 pilots could aspire to something other than zero-dark-hundred wake-up calls for exploration of the district. A favourite such option was *Empress 21* featuring a mid-day departure from Vancouver and an enroute stop in Prince George on the way to Fort St. John for the afternoon rendezvous of connecting flights. On hand as always, the base maintenance chief (the guru) was there to help organize anything that needed organizing and to lend a hand wherever needed. These seasoned, and sometimes grizzled veterans were the highly respected and highly qualified aircraft maintenance engineers who shared our responsibility for monitoring and maintaining operationally safe flying machines. As folklore would suggest, some of these guys had already forgotten more about airplanes than many of us would ever know. The fact that a certified engineer was added to the crew manifest and travelled onboard whenever we operated through stations lacking a resident guru says much about our company's commitment to safety along with its common-sense approach to logistical matters. Methinks these were the good old days before the pursuit of safety had finally reached "acceptable" levels.

With a lengthy recorded history, beginning with Alexander Mackenzie and extending through construction of the Alaska Highway (Alcan) during WWII, Fort St. John endures as a regional centre for industry and agriculture while evolving as a major hub for commercial aviation. Ideally situated at the crossroads of major highways and airways it had helped develop, Fort St. John's airport is the natural place of connection for northbound and southbound flights originating in Vancouver, Edmonton, or Whitehorse. As suggested by its daily flight schedule, YXJ could be regarded as the inner sanctum, the very heart of BC District; and, it does have heart. The low-key efficiency and family-friendly atmosphere seen here evokes the term *stylish professionalism*—a district-wide standard at its highest level. With almost as many aircraft on the ramp as passenger service agents on duty, each arriving through-flight is personally welcomed by an airport agent bringing copies of the latest weather and preliminary load information. Somehow, with almost as many aircraft on the ramp as baggage handlers on duty, all the freight and all the checked luggage is taken care of in less time than it takes to unload one such airplane at some mainline terminals. Sometimes, usually when behind schedule in terrible weather, there are bulky caskets of human remains to be wrestled from the cargo hold and/or Medivac stretchers to be installed across the tops of seats in our forward passenger cabin. The motto for BC District—*No Problem*.

Typical of most BC District stations, the Fort St. John terminal building incorporates a drive-in garage for collection of outbound baggage coming through the chute from the check-in counter. Conveniently located between that counter of customer expectations and flight-line realities is a small office-space containing a large desk supporting a VHF radio transceiver, a multi-line telephone, and several filing trays; the desk surface is papered in multi-coloured imagery over which huddles an earnest station agent busy plotting straight lines on graphs and inserting endless numbers into adjoining weight and balance tables while engaging visitors in lively conversation: *Anyone ever heard of a computer?* A nearby Teletype machine chatters incessantly; Dispatch is on the phone from Vancouver with a change in plans because of Watson Lake weather; an inbound flight is on VHF with a revised ramp estimate and a revised fuel load; one of the outbound flights is also on the air, confirming fuel on board and requesting late-load numbers … it's time to go. About then, another station agent hustles through the office carrying a late-bag bound for that very flight … back to the graphs and numbers … other agents appear out of nowhere to make PA announcements and to help with office communications. Somehow, everything gets done with barely a sign of panic or displeasure: such is life in Base Ops … as in Mission Control.

After a relatively seamless exchange of paperwork, passengers, and sometimes airplanes, flight crews then take off in different directions: one flight heads directly northwest toward Whitehorse, while our Flight 21 milk-run takes three 45-minute hops to get there. Fort Nelson (YYE) proves to be short and sweet, like Grande Prairie: many more trees but only half the number of short runways. "Empress 21 … Edmonton Centre, you're cleared to the Watson Lake airport for an approach … call us on the way out" is the ever-remembered ATC transmission that so clearly reflects the amount of "airspace and elbow-room" available when operating beyond radar coverage into airports without control-tower control; of course, such freedom did not come without occasional down-sides. The log-cabin terminal building at YQH Watson Lake is rustic proof of our position beyond 60° north latitude and a fitting reminder of how these airfields came to be. Closely related to the airways overhead and to the highway alongside, Watson and Nelson were original vital points on the vast, Edmonton-to-Fairbanks, Northwest Staging Route developed for the transport of men and equipment to Alaska and beyond during WWII.

My first 737 arrival at YXY Whitehorse brought palpable joy. How time does fly: it had already been five years since my first visit in the summer of ’69, and while little seemed to have changed with the airport or the town-site, the visibility was certainly better: the rivers and mountains were even more beautiful, the history more colourful and easier to understand. While meeting new colleagues, it was especially gratifying to become better acquainted with the ramp maintenance crew who had relieved me and the B-17 of that surplus Avgas five years prior. With an enduring sense of humour, one of them (Jim Austin) claimed to be still burning it in his boat and snowmobile. Whatever, it was wonderful to be part of that same team. Happily, the stylish professionalism found elsewhere in the district extended to this far north-western end of its route structure; the low-key efficiency and family-friendly atmosphere experienced on the ramp, in the terminal, and in the downtown office was as good as it gets. With staff-guided hiking excursions and rambling motor tours leading to staff meetings over dinner at the homes of local employees, Whitehorse layovers would slide-by pretty smoothly for visiting flight crew. That home-away-from-home feeling was enhanced, two years after this first layover, when an airport agent outfitted our party of southern tourists with three canoes for a two-week paddle down the Yukon River to Dawson City. A joyous being-in-the-right-place-at-the-right-time feeling arrived next day, out on Lake Laberge, when an orange-coloured 737 gave us a low-level fly-past on its way out of town … don’t ask.

Meanwhile, in this summer of ‘74, next day’s *Empress 32* blasted off runway 31L in Whitehorse with 32,000 pounds of thrust to soar effortlessly past mountaintops on its way to 33,000 feet while its instrument panel VSI (Vertical Speed Indicator) evoked a smile and a chuckle in remembrance of a less energetic experience off the same runway in a fully loaded B-17. Today’s “lengthy” 1:30 hop into Fort St. John was followed by a skip and a jump through Grand Prairie to Edmonton where we became *Empress 43* which skipped back through Prairie to John where we took the rest of the day off … just before midnight. Day three of this duty cycle began at the Fort St. John afternoon rendezvous where *Empress 31* launched us directly toward Whitehorse on the nonstop routing. Two hours later, we were out of there as *Empress 22* doing the milk-run south through Watson, Nelson, and John before overflying George to be home in Vancouver by 2100h. Hmm, YVR-YXS-YXJ-YYE-YQH-YXY-YXJ-YQU-YEG-YQU-YXJ-YXY-YQH-YYE-YXJ-YVR … looks like fifteen (15) take-offs and landings in three (3) days. How much more fun could a fella have? Of course, this and most other pairings could vary on different days of the week while also being subject to major revision with each seasonal schedule change. While other flight pairings were more efficient to fly, and while there existed another BC District sub-section over on the west coast, this 1974 introductory edition remains a full-Monty-full-meal-deal-favourite that captures the essence of the operation while outlining much of its territory.

Notwithstanding any holes in the logic or in the pocket book, many of us quickly adapted to the new normal that often demanded active participation in five to seven take-offs and landings per day. Unrecognizable in the moment, the changes brought on by such high-frequency operational immersion were subtle, inevitable, and pervasive. Though we might not have understood the term even if we’d heard it, we had unwittingly become accustomed to *wearing* the airplane—an apt metaphor for anyone who has been there.

19

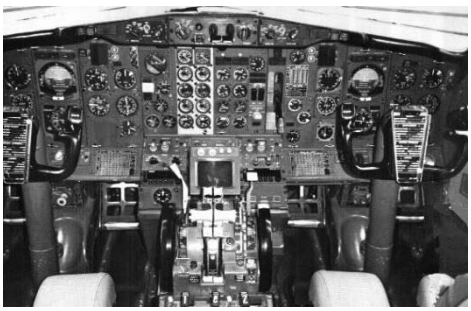
Transcon

After being checked into the right seat of Boeing's 737 twin-jet in mid-decade, the remainder of the 1970s brought a high-speed learning experience on a spirited new airplane that introduced a colourful new collage of people and places. Ironically, our airline's northern "bush division" was found to offer the most severe operational challenges along with the most relaxing administrative purview. However, although it contained the most fun and excitement, there was more to life on the line than BC District: sanity often requires a change, and seniority can sometimes offer a more reasonable mix with more efficient routes. Surprisingly, although flying back and forth across the country lacked the dynamics of the district, *Transcon* was found to provide its own adventure.

One particularly interesting day began with a late beginning because of finger-trouble on my fancy new electric alarm clock. No sweat: a call to Crew Routing and a hastened departure got me to Dispatch in time to meet up with the captain at conclusion of "our" flight briefing. After a quick check of my employee mail box on the way out, I caught the next elevator down behind him. Surprise! There was no sign of my captain or the crew shuttle bus at the departure door. After an anxious wait, the shuttle finally returned for its next circuit whereupon I queried its driver about his previous hasty departure whereupon he advised me that when he had asked, the other pilot said no one else was coming. My heart rate was up a bit by the time I got to the airplane where the captain was found standing in the forward galley chatting with the flight attendants. No, he had not done the external pre-flight inspection. Though many captains enjoyed doing externals on occasion and would happily have done one on this occasion, Captain X was not one of them. Oh well, get your butt in gear and get out there and get it done. Settling into my seat after completing the external, it was further disappointing to see no start had been made on the interior cockpit check. Although technically a two-pilot procedure, a one-pilot prep in advance (by either) can shorten it considerably … not so today. We were very late and getting later. My heart rate was climbing and our communication was tanking. Hoping to diffuse the situation or at least get some help, I asked Captain X if he had ever been late for a flight. "Never you mind!" he declared, "You sit in your seat and do your job, and if you do your job half as well as I do my job in this seat, everything will be fine!"

Silence.

The answer to an eternal conundrum was clear: you don't have to know your limit in such matters, your body will tell you. Pulling up my tie and putting away my papers, I picked up my brain-bag briefcase and left the cockpit. On the way out the front door, a late boarding businessman asked if I was on the wrong airplane. "Afraid so," I said. A quick call alerted Crew Sked and one of those last-minute scrambles began. By the time the dust settled a few days later, I was docked two weeks' salary for my troublesome behavior, a penalty made easier to accept when receiving thanks from colleagues for helping to improve their subsequent cockpit relations with you-know-who.



Meanwhile, it occurred to me that the seed for this unfortunate issue with Captain X had been sown on our previous flight together, when, willingly or otherwise, he contravened a company directive. It was an eastbound red-eye out of Vancouver with me at the helm for a post-midnight stop in Winnipeg on the way to Toronto when the captain initiated a conversation … somewhat of a surprise in itself. The fact that my suspect attitude and poor decorum were primary topics of discussion was not surprising; although, a simple question about my descent planning would have been more helpful. My next look at the YWG DME readout (Distance from Winnipeg) was a call to action: immediately after receiving descent clearance, the throttles were closed and the speed brakes raised while our nose was pointed down toward the barber-pole that goes CLACK-CLACK-CLACK whenever maximum-allowable-speed is reached. Not normally required, this extreme action was necessitated by the100-knot tailwind we had been enjoying while surfing the jet stream. Although wind speeds would decrease with decreasing altitude, we could expect westerly tailwinds all the way to ground level. As to be expected, runway 13 was active for landing at Winnipeg—toward the city for noise abatement—despite light tailwinds on the runway. Meanwhile, we were on a high-fast straight-in approach. "You're not going to make it!" exclaimed the captain, "You're too high, you're too high!"

Acknowledging the probable truth of the matter, I suggested a 360º turn to lose altitude if he was uncomfortable … no action, no response. Dropping through 10,000 feet with gear down and speed brakes still extended, flaps were lowered as soon as possible with decreasing airspeed until we had our full 40º of trailing edge while maintaining VRef+20 (20 knots above landing threshold speed). Crossing the outer marker, five miles back, and falling like a rock, the captain resumed his admonishment. "You're not going to make it!" he declared, "You're to too high, you're too high!"

Although becoming somewhat optimistic about our chances, I suggested he request a go-around (overshoot) for a second attempt if he was uncomfortable … no action, no response. Speed brakes were cancelled over the approach lights and the airspeed bled back for a smooth touchdown on the standard 1,000-foot dot. With normal braking and reverse thrust, that phenomenal little airplane turned off the runway at the usual taxiway for a direct entry to the terminal apron. Situation normal … kinda. Not touching the throttles for 30,000 feet between top-of-descent and the use of reverse thrust on the runway is a rare feat; a power-off dead-stick landing down-wind at night contravenes company SOPs (Standard Operating Procedures) in at least one category.

Although we never became fast friends, Captain X and I did manage to maintain our professionalism by doing several subsequent flights together without incident. As many pilots agree, some of our best flights are the ones not taken; and although weather or mechanical issues are most often responsible for the threatening situations, it's healthy to remember the power that personalities can wield. Amen.

Another Transcon event of note occurred during the "ATC strike" of June 1976 when Canadian air traffic controllers withdrew service during protracted governmental discussions regarding bilingual (French/English) communications in aviation. While on layover at Ottawa, a visit to the associated injunction hearings in the Supreme Court building preceded a lengthy afternoon hike to visit former RCAF friend Bill Fowler and his family out in a Rockcliff-area suburb where fatigue and a late dinner prompted a good night's rest on their rec-room sofa—there was nothing happening at the airline: domestic operations had ceased. That last assumption was blown away by a rude awakening next day when a flashing RED telephone and a carpet-full of paper notes offered welcome back to my hotel room. Now obvious, the ATC situation had inspired a mass evacuation of flight crews early that morning and the escape bus was long gone. Although my crew's routing was unknown, the company's desire to get everyone home was understandable; otherwise, we would all be on the road collecting pay and duty credits until … "So, Peter, get yourself on the next bus to Toronto and call us when you get there!"

The bus ride was a novelty … dressed in civilian attire and trying to keep my airline brain-bag out of sight while riding with a full-load of disgruntled travellers. An overnight in Toronto had me in position for a taxi ride to BUF Buffalo-Niagara International Airport for a flight to SEA Seattle-Tacoma for another bus ride to home base YVR Vancouver. Ta-da! Before this plan went into effect, one of life's brilliant ideas came to mind: because my family was otherwise unable to fly my grandmother out to Vancouver as planned, perhaps she could come with me. Thusly began one of life's great journeys. Collecting 90-year-old Agnes in the assigned airport limo, we launched over the Burlington Skyway on the Queen Elizabeth Way and enjoyed a pleasant drive with no delays at the border. With the help of my employee discounts and superlative efforts by American Airlines staff at BUF, Grandma was given a seat beside me for our connecting flight to ORD Chicago where a "flying" wheelchair and further superlative efforts by ground staff helped us change terminal buildings in time to catch our United Airlines flight out. As the inbound captain had announced from the holding pattern, "Don't worry folks, if we're late everyone else is also late." And so it was. Once airborne and cruising westbound, Grandma happily joined me with a glass of Port in celebration of our good fortune.

As expected, the arrivals level at SeaTac Airport was in dire straits, overflowing with travellers trying to reach Vancouver and other points in western Canada. With but slightly onerous delay, a bus arrived for the journey north and all went well until reaching the Canadian border. My request to disembark the two of us there, within a few short miles of my home and my parents' home where Grandma was bound, was denied by the bus driver whose duty compelled completion of the mission to downtown Vancouver. Facing the undesirable prospect of several more hours on the road after an already long day with an aging grandmother, I employed persuasive discussion along with stubborn refusal. Grandma and I walked off the bus and quickly boarded my father's waiting car, ending a long, but happy day. Repercussions were not forthcoming and the bus driver probably kept his job by keeping his mouth shut. [If only I could more often do the same.]

As interesting and rewarding as it was, airline flying was not everything, and from that same summer of ’76 comes another memorable diversion. Reminiscent of Navajo Bill Horvath in Barbados, a former airline pilot and tennis-playing friend Bill Stewart was now a self-styled entrepreneur buying up old and derelict airplanes for refurbishment and resale. In the current case, this Bill was concentrating on the DHC-2 *Beaver* by collecting American military survivors of the war in Vietnam and having them overhauled at various venues before offering them as replacements in the high-attrition realm of northern Canadian bush flying. The task of ferrying the airplanes north brought me into the action. Accompanied by our spouses, a short hop to YKA Kamloops in Bill’s twin-engine *Aztec* (a later and more powerful iteration of the PA-23 Apache) provided my introduction to the DHC-2 Beaver, De Havilland Canada’s second-ever airframe design that went into production in 1947, almost simultaneously with its DHC-1 Chipmunk.

Designed to surpass the old (1935) Noorduyn Norseman in bush-flying capabilities, the all-metal Beaver featured large cargo doors on each side of the fuselage capable of receiving 45-gallon fuel drums into a spacious cargo hold when not occupied by up to six passengers. With a STOL wing (Short Take-Off and Landing) and a 450-hp Pratt and Whitney R-985 *Junior Wasp* 9-cylinder radial engine, this 5,000-pound workhorse is capable of carrying 2,000-pound loads in/out of small spaces. Motoring along at about 110 knots (125 mph) on 95 gallons of 80/87 Avgas in three fuselage tanks, it is good for 400 nautical miles (450 sm). As well as holding the engine oil tank for space consideration, the Beaver cockpit contains a unique control yoke that transfers to left or right seats from a single pedestal. On wheels, skis, or floats, the Beaver was an instant hit. More than half of the 1,657 units produced prior to 1967 went to the U.S. Army as the L-20/U-6 utility transport, many of which saw service in Vietnam. Some of these made it back home as experienced veterans, and that’s where we came in.

As an unsophisticated new-comer lacking experience with this aircraft genre, I was able to mollify my angst by seeing the Beaver as simply a high-wing Harvard … after all, as well as having very similar dimensions and about the same 5,000-pound operating weight, they both have tail wheels. Although the Beaver’s *Bug Smasher* engine makes it less powerful than the 600-hp *Yellow Peril,* its STOL wing design makes up for any shortcomings.

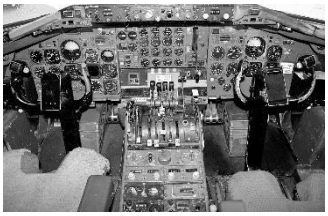
Probably more to do with Bill's Day-Timer commitments than my proficiency, his two-circuit 20-minute check-out soon launched me and my partner Sharon on a delivery flight to YXD Edmonton Municipal Airport in Beaver C-GJAK. For the high-flying airline pilot, it was one of life's special treats—a delightfully low-level scenic tour in fine weather, up the North Thompson Valley, through the Rocky Mountains, and then down the North Saskatchewan River. For housewife and mother who had made last-minute care arrangements for two young children at home, it was more a change of scene than a day of rest. The womenfolk did enjoy some productive shopping time next day while the boys were off playing with airplanes.

For what it might be worth [nothing], my "check ride" in Aztec CF-KAU filled a small blank in my log book to include all four of Piper's then-current twin-engine aircraft. No, I am not a plane bagger or a peak bagger; however, the immediately subsequent flight gave me a good look at some mountain tops. After the Aztec ride took us to Kalispell, Montana (KAL), for another DHC-2 in need of a ferry flight to Edmonton, the first leg back with Beaver C-GKEN—through Cut Bank MT (CTB) for fuel—provided my first hands-on experience with the power of real mountain waves on a light aircraft while climbing the high ground of the continental divide—another lesson learned. Although never ever close to being a bush pilot, ensuing years brought me eternal respect for this aircraft and for its operators … especially when canoes are lashed to the float struts. Meantime, I had been fortunate to thoroughly enjoy 8:20 in the iconic DHC-2 Beaver … on wheels.

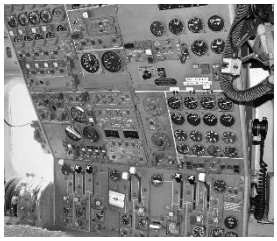
20

The Heavies

In aviation, as in other realms of human endeavour, the innately human attraction toward bigger and better can be difficult to resist. Circa 1979, after five years as First Officer on the B737, a modicum of curiosity and an excess of financial over-expenditures encouraged an upgrade to the DC-8, the long-serving, four-engine mainstay of the CP Air fleet. Developed by Douglas Aircraft in the mid-1950s, this first-generation narrow-body jetliner had taken many forms during fifteen years of production while vying with Boeing's 707 for market share. A total of 556 DC-8s, in one form or another, were eventually manufactured.

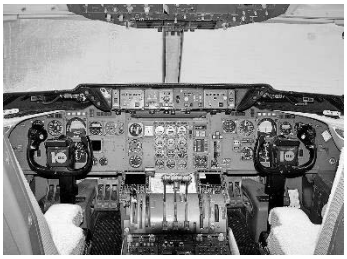


Canadian Pacific Airlines (CP Air's alter ego) had initiated delivery of 12 airplanes representing four of the related species. The original five units were "diesel eights," standard-length 43-series models with Rolls-Royce *Conway* engines delivering 17,500 pounds of thrust each. At the other end of the spectrum were five 63-series "stretched eights" with four Pratt & Whitney JT3D-7 engines, each delivering 19,000 pounds of thrust. In between were two "middle of the road" 50-series models with the original short fuselage and slightly less powerful JT3D engines. With gross weights ranging between 300,000 and 350,000 pounds and with passenger capacity varying between 130 and 230 souls, there were numerous variations on the theme. With four engine types and a systems panel filled with differences, the DC-8 was a worthy challenge to any young Second Officer on the oiler's desk. In comparison to the previously flown Argus, our smallest DC-8, while having an identical wingspan was twenty feet longer and almost twice as heavy; at 187 feet, the stretch-8 was another forty feet longer again. Cruising at M .80 and carrying 24,275 US gallons of fuel (169,925 pounds), the DC-8-63 had an effective range of 4,500 nautical miles (5,200 sm or 8,300 km).



With introduction to more sophisticated navigation equipment came my first gasp of amazement when negotiating the Andes Mountains near Lima, Peru. Another first was the blinding light of sunrise through the morning fog of Amsterdam after an all-nighter from Vancouver: arriving in time for Europe's morning rush hour was a wake-up call in itself; flying back home into a sun that never set had the opposite effect.

Along with our innately human attraction toward bigger and better comes the pilots' irrefutable desire for newer and faster. After one very short year on the DC-8, another equipment bid resulting from airline expansion offered me a right-seat job on the DC-10. The eruption of Mount St. Helens in southern Washington State during the month of May 1980 forever marks the time frame. Our full course of upgrading trainees—Captains, First Officers, and Second Officers—were in southern California attending Douglas Corporation's flight training facility at Long Beach. The airplane was large and complex as were the multiple-choice exams. As was soon evident in simulator training exercises, the DC-10's Abnormal/Emergency Procedures Checklist was as fittingly large and complex as the airplane. No sweat! With Ernie Wells in command and MOT's Sid Quickfall looking on, we aced our final check ride and headed home for type certification and line assignment on the DC-10-30.



Developed in the 1970s, the DC-10 is a wide-body, three-engine, medium to long range jet transport designed to replace aging DC-8 fleets and to compete with the three-engine Lockheed L1011 while offering a viable alternative to the four-engine Boeing 747. It was reasonably successful on all counts. From an original -10 series for domestic use through long-range -30 and -40 series to the KC-10 mid-air refuelling tanker, a total of 446 units were built, the most popular model being the -30 series that saw 163 deliveries to 38 customers worldwide. We operated eight of these large -30 series airplanes—each 170 feet long by 165 feet wide with a 58-foot tail, it was significantly shorter and fatter than the stretched DC-8. A third main landing gear assembly on the aft fuselage center line improved wheel braking performance while helping distribute 555,000 pounds of gross weight. Three General Electric CF6-50C turbofan engines—one under each wing and one at base of the vertical stabilizer, each with 51,000 pounds of thrust—pushed the bird as high as 42,000 feet while cruising at Mach .82 (M.88 max). With full tanks of fuel (36,650 US gallons or 256,550 pounds), the affectionately known "Douglas Diner" could comfortably carry 255 customers, in three-class configuration, a total of 5,500 nautical miles (6,500 sm or 10,000 km). Although the airplane was capable of carrying 380 passengers in typical single-class configuration, you might not wish to be there.

Along with high-density Transcon routes, most of my DC-10 flying was on the North Polar route to AMS Amsterdam Schiphol and the South Pacific route through HNL Honolulu to SYD Sydney. Unfortunately for my record keeping, by this time, my log book entries had given way to monthly printouts issued by the company.

Along with the aviator's attraction to bigger and better, newer and faster, there often exists another inherent human trait known as pig-headed personal greed. Throw in a failed marriage and something resembling a mid-life crisis to set the stage for highly unusual dramatic events. Soon after qualifying on the DC-10, my slowly improving seniority combined with further airline expansion awarded me a First Officer position on the B747 … on paper, at least. A year after my successful bid to the larger equipment, nothing had happened for me in that direction: while I remained stagnant on the DC-10, other pilots, sometimes junior, were being upgraded to the 747. Although such things are not unusual in the logistical complexity of airplane cross-training, this particular pass-over scene was filling me with angst. Not that the DC-10 was not a good airplane; in fact, it was a pleasure to fly. However, the longer I languished thereon, the more I found little things to complain about. After all, why drive a Chev when you are entitled to a Cadillac. (Oh-oh!) With enough of my pestering, the Flight Ops administrators called in the company doctor (the same who had our faces shaved ten years prior). Unfortunately, before I could stop it, the displeasure with my predicament became inextricably linked with prevalent and widespread public fear of flying in this airplane which then carried a poor safety record. Unable or unwilling to differentiate between my expressed distaste for my current position and some all-pervasive imaginary fear, good doctor Hemming pulled my licence and sent me off to see a psychiatrist.

There was dude! Wearing a black and white hounds-tooth jacket and sporting an archetypal goatee, he wielded a polished wooden walking cane with a fancy silver handle. During our frank and friendly session, I explained my position while confessing to my greed and impatience. While riding the elevator after our meeting, he confessed to not wanting to fly on DC-10s himself and asked if I was similarly fearful. "Hell no!" said I in all truth, "I am just back from an air force reunion in eastern Canada and two more flights on the DC-10." (Sometimes I wonder if he was setting me up.)

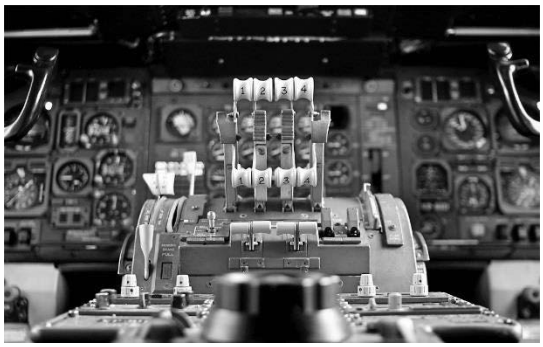
"Oh, I see," said good doctor Fred while renewing my licence. Sometimes I wonder if the company and its doctor had simply overreacted to their fear of the DC-10 being bad-mouthed by one of their own. I should have kept my big mouth shut in the first place … hello? What crisis? There is no one else to blame and excuses are useless. Whatever the reasons might have been, I had been much more determined than usual in trying to steer things my way.

Soon thereafter, the logistical complexities of aircraft cross-training ushered me into a B747 ground school course. Although it was a densely packed curriculum similar to the DC-10 course, (drinking out of a fire hose), the '47 course had a different feel. Perhaps because it was presented at home by fellow employees, it seemed to have more depth; more so than the packaged deal down south, this course was more about learning the airplane than passing an exam … although we had to do that as well. Yes, it is a very large and very complex airplane: it has a greater number of large hydraulic systems than the 737 has engines … but these larger systems are almost as simple to operate as those on the much smaller 737. Though never totally subscribing to the mantra—*If it ain't Boeing, I ain't going*—training and conditioning had nevertheless imprinted my personality with a preference.

Beginning in 1973, CP Air took delivery of four B747-200 series aircraft that became the flagship of its orange-coloured fleet. In any colour, the 747 was a magnificent looking machine. Of cutting-edge design, it looked like it wanted to fly; although bigger and heavier than the rest, it flew with the best. Its third-floor upper deck became a trademark. Its size was incomparable: 231 feet long by 195 feet wide with a tail height of 64 feet. Fully loaded, it weighed in the neighbourhood of 800,000 pounds. Once airborne, four Pratt & Whitney JT9D-7 engines, each with 54,750 pounds of thrust, could push the big ship along at a cruise speed of Mach .85 (560 knots or 650 mph). With 50,000 US gallons (350,000 pounds) of fuel, the 747 could carry 450 customers for 6,000 nautical miles (7,000 statute or 12,000 kilometers). What an airplane!

The company's full-axis simulator with visual presentation gave us a realistic preview of where we were going. Although almost seven times the mass, the 747 flew remarkably similar to a 737; even with induced artificial feel, some airplanes just feel right to some people. Although bigger and broader, its systems layout and operation were remarkably similar to the other Boeings … except that leading edge devices were actuated by compressed air from the engines rather than by hydraulic pressure.

It was a treat to fly.



Successful completion of my final check ride with instrument endorsement on the B747-200 was a definite high point in my aviation career.

It went downhill from there. Citing unavoidable delays for type certification on the real airplane, my superiors advised me to use up the last two weeks of my vacation time, which I did. Upon my return, I was surprised and disappointed to find myself no longer listed as a B747 First Officer. In my brief absence, a decrease in market demand had prompted a reduction in scheduled operations that was reflected in an equipment reassignment bid. In keeping with my fall-back position standing-bid form, the process bounced me from B747 F/O to B737 F/O. The need to update my standing bid had never seemed necessary; the thought of needing to insert a B747 S/O bid to remain on the airplane had not crossed my mind. There was no one else to blame and excuses are useless; I had failed to cover my ass and there was no out. My queries about the possibility of a type-rating check-out on the airplane were met with requests for a $5,000 user-pay fee. So be it: my small battle had been won, but the war was lost. No hard feelings: even if a far-out flight of fantasy could conjure up an intentional arabesque of gigantic proportion, the company could not be faulted for putting me in my place and reminding me who was boss; ‘twas not the first nor last time the reminder was necessary. Ironically, federal regulations and company policy would soon change, allowing qualified pilots to receive type certification directly from simulator test-rides without having flown the actual aircraft. Ironically, my friend Garth who remained on the 747 as Second Officer was soon upgraded to First Officer status because of increased market demand; and by the time seniority allowed me another look at the right seat, our “expensive” B747s were being traded in for more DC-10s. Though never on my licence, Boeing’s 747 is always in my heart.

21

The Rock

So much for big airplanes and big greed

After several years of flirtation with large airplanes and international routes during the early 1980s, the time came to get back to smaller airplanes and smaller dreams. While somewhat disappointed by failing to fly the B747, there was no hesitation about going back on CP Air's B737. Time had passed and seniority had spun its magic: now sitting as one of the most senior on a very long list of B737 first officers, my working conditions improved dramatically. All flying was bid and awarded monthly in seniority order from top to bottom, and "top guns" had first picks of whatever was available. Along with a smattering of BC District for variety, there were one-day, high-credit, double shuttles to California—a San Francisco return followed by a Los Angeles return on the same day. Similarly, as well as a variety of Transcon overnighters, there were numerous one-day, return shuttles available to Toronto, Ottawa, and Montreal. Life was good: fewer days on the job allowed more days for pursuit of other interests … for better or worse … as long as it lasted.

My number finally came up in early 1986, and it had seemed like a long time coming. After five years as a second officer and ten years as a first officer, seniority finally offered me a captain's position on the 737 and the joy that comes with it. The added responsibility accompanying the upgrade was easily offset by the pleasure of choreographing one's own dance. However, of course, along with a raise in pay came a hit to the working conditions. Relative seniority over in the new left seat had me well down a very long list of B737 Captains with far fewer options available on the monthly bid. Forget the high-yield one-day shuttles: get accustomed to multi-day milk runs with a high percentage of *Midnight Cowboys* and overnight *Red Eyes* back and forth across the country. No sweat, it was well worth the freedom to be again flying in control—setting the course and establishing the style—instead of always having to fly formation on someone else's ideas. "Congratulations Pete!" chorused my new first officers, "You are now your own arse-hole."

The 1980s brought immense changes at CP Air. The acquisition of Eastern Provincial Airways in ’86 provided access to routes in Atlantic Canada and a revisionist name change to [go figure] Canadian Pacific Air Lines. Acquisition of Nordair in ’87 brought supply routes to the eastern Arctic and charter routes to the Caribbean. Suddenly within a year, we ourselves were acquired by Pacific Western Airlines and rebranded as *Canadian Airlines* while being retrofitted with an old logo—for the first time in decades, Canada’s western airline had a Canada Goose mascot. Officially doing business as Canadian Airlines International (CAIL), we had acquired virtually every airworthy B737 in Canada. The exact number is missing in action, but we had scores of them: CPAL had about 30, EPA brought in 7, Nordair had at least 10, and PWA had about 25 (through previous acquisition of Transair). Reminiscent of CP Air DC-8 days, we suddenly had a wide assortment of 737 sub-types requiring different coloured pages in the flight manual for appropriate identification. The lighthearted idea of repainting our cockpit interiors to match the appropriate flight manual colours was never acted upon: things were happening too quickly and we were about to acquire control of good-old Wardair. Keep your seat belts fastened.

Amidst the name changes and new paint schemes, boredom was never an issue: at times we flew with two slightly different engine models under our wings; at times we also flew with slightly different wings attached to a longer fuselage—the B737-300 had been added to our inventory.

The first of subsequent versions designed for improved efficiency, the B737-300 carries 40 more people (150) about the same distance as the 200-series for slightly less fuel cost because of its two high-bypass turbofan engines—the CFM56-3 with 20,000 foot-pounds of thrust. Re-engineered to fit within the limited ground clearance available, the engine is installed forward of the wing while enclosed in its characteristic flat-bottom “hamster-pouch” nacelle. Another external difference is the dorsal filet extension on the vertical stabilizer, necessary for aiding directional control with the asymmetric thrust of a more powerful engine. In the cockpit, many of us got our first look at electrified TV-style primary flight instruments along with a new-age FMCS (Flight Management Computer System) … by no means a state-of-the-art glass cockpit, but certainly a step in that direction. Initial concern regarding incompatible differences between types was offset by a classroom session along with additional pages in the manuals. Worst case scenarios, such as having to operate a -200 flight to dark and stormy Terrace at the end of a lengthy -300 Transcon flight pairing, never materialized.

Assigned primarily to *Attaché,* a subdivision within CP Air catering to business travellers, our three 300s operated between major Transcon hubs, carrying approximately 100 premium-paying customers in Business-class configuration—the centre seats in Economy were folded down as shared side-tables. Although the idea didn’t fly for long, the airplane was a pleasure to fly … though more like driving a new luxury sedan with automatic transmission than the old -200 roadster with its four on the floor.

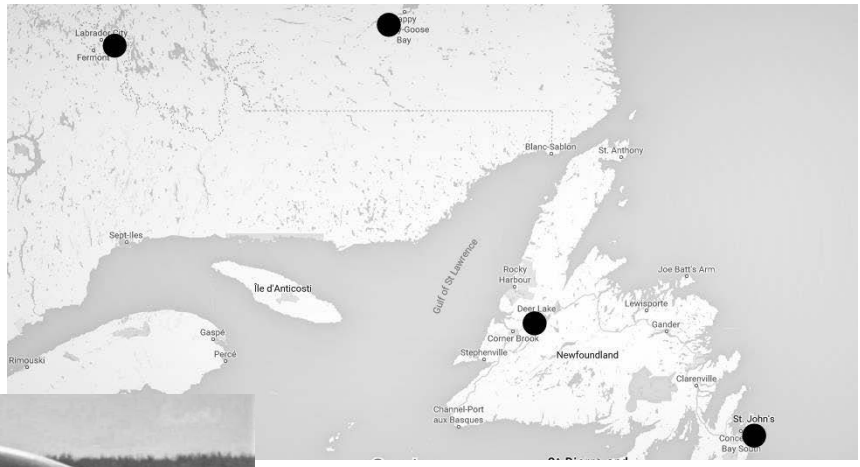
Once upon a time, while residing in a town called Whistler, a miscommunication with Crew Sked (Crew Scheduling, aka Crew Routing) saw me unintentionally violate conditions of my stand-by reserve assignment. It was the last afternoon of a multi-day "on-call" reserve cycle before commencing days off, and the situation around Mission Control in Vancouver was frightfully boring: nothing untoward was happening on the flight line, and there were ten (10) junior pilots to be called ahead of me if anything unforeseen did happen. Thus, the fine people behind the desk granted me a three-hour grace period without telephone contact [cell phones were not yet standard equipment]. Of course, I went skiing. When I checked back in by phone at the agreed time, I was too late. Murphy had struck again: a sudden crisis of considerable magnitude had occurred somewhere in Canada, and a concurrent shift change at the schedulers' desk in Vancouver had found my absence in Whistler to be suddenly inexcusable. Yes, I could see it coming: when my next reserve duty commenced two days hence, the telephone rang at precisely 0600h. "We've got a trip for you, Pete. Are you ready to copy?"

A dead-head (non-operating passenger mode) got me into Halifax for an overnight before next day's itinerary in Atlantic Canada. As life would have it, recent airline integration had seen my old air force stomping ground become part of our overall route structure, such that Halifax and St. John's had already become popular places for laying over on west coast time. Accompanied by a very competent former EPA first officer based in Halifax, next day's flight proceeded as expected through YYT St. John's, YDR Deer Lake, and YYR Goose Bay to YWK Wabush, adjacent to Labrador City near the border with Quebec. The return through Goose Bay was similarly uneventful; however, while sitting on the ramp during passenger exchange at Deer Lake, the situation took on a little edge. "Lard Jaizuz!" exclaimed my ever-attentive cohort with his wealth of local experience in review of the latest weather report, "This could be gettin' to bein' a hard day on the rock." His subsequent explanation described a situation whereby a rapidly moving weather system brings very high winds and very poor visibility to the island's southeast corner whence we were bound. Furthermore, he described how a southerly wind over that deeply incised rock-bound terrain created extreme turbulence bordering on severe. Sure enough, the weather was coming down much faster than originally forecast; and sure enough, it was my turn to fly the leg.

Sure enough, by the time we received clearance for an ILS approach to Runway 16 at YYT, the visibility was down to a fraction of a mile and the wind speed was gusting to fifty from forty degrees right of runway centerline. Thankfully, my well experienced colleague was familiar with PMA (Pilot Monitored Approach) whereby he did all the coordination and communications while I did nothing other than fly the airplane and follow his instructions without risking distraction or disorientation by looking out the window. We couldn't have managed it any other way: with two hands on the yoke, it was all I could do to keep the airplane icon close to center target of the Flight Director's command V-bars in my primary flight instrument. In all my years of flying in all kinds of weather on both edges of our continent, I had never experienced anything like this before, and I have not experienced anything like it since. Unlike the big "whammies" experienced elsewhere, this was more like super-high-speed-wash-boarding, like hitting moguls on the ski hill at a machine-gun rate. Although often beneficial in tough times, the autopilot's control wheel steering could not remain engaged in such conditions: the entire instrument panel was shaking and vibrating at such frequency that it was extremely difficult to focus on even one flight instrument … "one hundred above … Decision … contact! You're there Skipper!"

During the next day's peaceful dead-head flight home, it was entertaining to consider this coast-to-coast adventure as a complex arabesque arranged by the company to put me back in line and to remind me who was boss after my recent scheduling misdemeanor. After all, if they could see the weather coming, the more power to them: their prescience far exceeds previous administrative experiences with Atlantic weather from my air force days. Then again, perhaps the flight's originally assigned captain was locally based and, like many experienced east-coast pilots, had seen the impending collision of Hatteras and St. Lawrence low pressure systems. Maybe he took the day off and went skiing. Most likely however, it was simple Karma—the weather gods having their way with me. In any case, that *Wabush Cannonball* is one of those wildly exciting flights happily left behind.

Under the heading of retrospective analysis, hindsight is still slapping my wrists for failing to continue making hand-written entries into my pilot logbook. Though computer-generated print-outs are a fine means for organizing data, they do not include the personal names and incidental notations that distinguish one long line of numbers from another long line of numbers. This was one of those occasions for which a colleague's fine work and superb professionalism should be honoured by name. I sincerely regret this omission. Thanks for being there, Number One.



22

Empress of Stikine

After photographing its coast mountains from a B-17 in 1969 and then seeing most of the rest while flying B727s and B737s with CP Air, my exploration of BC District went to another level in 1979 while canoe-tripping with fellow pilot Hal Marsden, an original course-mate happily addicted to high mountains and white water, having already cut his teeth on the South Nahanni, Back, and Coppermine Rivers. By contrast, I was a slightly older wannabe with just enough experience to be dangerous. Nevertheless, the motivation of elementary school geography and my recent infatuation with this region's topography made it impossible to resist the opportunity of paddling the wild Stikine River … in the "middle nowhere" between Terrace and Whitehorse.

Highway 37 was nothing but a rough stretch of gravel when we motored north to another world in September of '79. Though perhaps a bit of a stretch for many city dwellers, the scene at the float-plane dock on Eddontenajon Lake, about 150 miles south of the Yukon border, was archetypically Canadian: back-dropped by serious verticality and warmed by reflected sunlight off shining waters, a dozen or more humans idled among tons of boxes, bags, and boats being loaded and off-loaded from a solitary yellow float plane that came and went as the day went by. Hikers, paddlers, hunters, and prospectors … we were all in the same time zone that had no clock. Unlike the temper of southern highways, there was no sign of haste or panic on the dock, only warm smiles and friendly banter; although everyone was anxious to get where they were going, the only sign of anxiety was the excitement coursing through our veins.

After lashing our old and wrinkled 17-foot Grumman aluminum canoe (ugly but durable) to his port-side float strut, our continuously busy and calmly intent pilot/load-master arranged us and our gear inside his DHC-2 Beaver before pushing off the dock and battery-starting its 450-hp Wasp Junior engine. A one-hour charter flight took us east by southeast over a southern section of Spatsizi Plateau (Provincial Wilderness Park) to the upper reaches of the Stikine River where our obviously competent pilot deposited us and our gear on the shoreline of Tuaton Lake. Next day, my appreciation for our pilot and for the unwritten *law of the north* increased exponentially when, with slight diversion from another charter, he delivered my camera box that had somehow become lost on the dock and missed yesterday's flight. As subsequent experience would soon confirm, Murray Wood was a pilot of legendary skill and a well-regarded person throughout the Stikine Watershed. We would fly together again. Thank you, Murray.

Thus began my first canoe trip on the Stikine. It would not be the last. This one began with a week of hiking alpine valleys and scrambling up several headwater peaks above 7,000 feet where meltwater drinks from its high glaciers provided meaningful introduction to River Stikine—a relationship that would soon deepen. Another week of clear, warm weather blessed our once-in-a-lifetime experience on the upper reaches of this dynamically beautiful river … dancing sublimely through a natural landscape that invites superlatives—archetypal and world-class come to mind. By contrast, our experience on the lower Stikine was dismal, giving us nothing but wind and rain in our faces while denying any visual appreciation of the Coast Range magnificence that, so we were told, evokes similar superlatives. Between these two extremes, the Grand Canyon of the Stikine gave us something else to look at … helicopters.

After 150 miles of near wilderness on the upper river, it was a shock to see so many people and so much machinery concentrating on the "wild" river's 50-mile mid-section where BC Hydro was preparing for construction of two large hydroelectric dams. For reasons not clearly understood, the situation did not sit well with me; perhaps, for the first time in my nomadic existence, I was beginning to develop a sense of place.

Several months later, a meeting of similarly concerned citizens at Robson Square led me and my questions to membership in a Vancouver-based conservation group (friends of the Stikine) to support Stikine-area residents who were opposed to the damming of their Great River. Thus began seventeen years of pushing paper and showing slides amidst scores of meetings and conferences flowing into workshops and committees leading to several court appearances in the hallowed halls of justice. While that story is a long one, best saved for another writing, it was a personal-life segment that provided opportunities for being on the land and waters of BC District when not flying over them. As well as prompting near-annual pilgrimages by canoe, raft, and horseback, the necessary research always cried out for airborne perspective.

Enter Bill Murray—a long-time mentor at the airline and on the ski hill—whose respect for BC District and for wild places in general motivated his offer of help which included CF-VSB, his family's float-equipped Cessna 180. Allocating two weeks to the cause in the summer of '83 and again in '84, we twice flew north in VSB aiming to photograph the entire Stikine River from top to bottom. Before starting out, a PA-18 *Super Cub* (C-GTXK) at Fort Langley helped endorse my licence with a float rating that has always looked better on paper than on any kind of water. Once underway, the scope of our undertaking was difficult to ignore: only the most hardened of tourists could feel blasé about transiting north along Georgia Straight and flying up Knight Inlet to cross the Coast Range at Mt. Waddington in the light of a clear summer day. For me, it was especially poignant to be looking up at the glaciers that had caught my eye from 30,000 feet 15 years before; and, although airline routes had taken me overhead the area many times since, this low-level perspective was as humbling as it was awe inspiring.

Meantime, five hundred miles farther north, our temporary home became Tatogga Lake Resort, a rustic but cozy gas station and restaurant on Highway #37, where a small log cabin by the lake offered bunks for our sleeping bags within steps of a sturdy dock where our trusty steed VSB was securely moored. Parked near the centre-point of the Stikine Watershed, we were at the centre of our universe and warmly hosted by Mike Jones, himself an experienced pilot as well as a seasoned trapper, biologist, and river rat. In fact, one of the more exciting moments for Bill and myself during two seasons of flying the Stikine occurred on a down-day when Mike took us for a ride in his riverboat. It was not a leisurely cruise. It was mostly a high-speed, albeit smooth, scream downriver from the highway bridge into towering walls at the head of Stikine's Grand Canyon where he mercifully reversed heading immediately above Entry Falls … before then allowing us to drift backwards, perilously close to the lip while countering the current with power from his two big-black engines … beyond which we had too-good-a-look at the first tumultuous drop in the canyon's notorious forty-feet-per-mile descent. It was a special moment, a moment of extreme exhilaration seldom encountered … fear and danger almost forgotten … a river so pure and powerfully beautiful, it beckons the observer to jump in. Standing at the wheel with one hand on the throttles, Mike grinned back with an emphatic "Pray to the God of Mercury!"

By 1984, Bill and I had managed to fly and photograph the entire length of the mainstem Stikine. In the process, along with moments of extreme visual splendour came introduction to a never-ending course in river education: *Riverology 101* is our title for lessons about the river coming from the river; though in a sense autobiographical, this one river's experience can be applied across the genre and beyond to include other forms of existence. By default, its natural character is inextricably linked to the nature of other rivers connected to it, which are themselves inextricably linked to etc., etc.. Short story: every river is more than a line on a man-made map; the whole river is a cycle of infinity, like an inverted tree blossoming backwards on a scale and timeline we pretend to understand by mathematical calculation. Yes, in a watershed context, the river becomes more and more difficult to define; and no, as the simplest experiments will prove, you cannot step in the same river twice. Nevertheless, mankind seems determined to manage the wildness out of it. Where were we?

Ah yes. Whenever weather allowed, VSB would take us on task, either to the upper river segment or to the lower, most often stitching back and forth across the mainstem while sidling upstream and/or downstream with the right-side window open and two SLR cameras firing at will. In such day-to-day operation, Bill displayed great courage in checking me out in the 180 for take-offs and landings; he needed only jump once into the water to prevent a docking event … some people are more protective than others. On another occasion, Bill demonstrated exceptional skill as well as great fortitude on a visit to Telegraph Creek: reckoning Sawmill Lake to have insufficient length for his 180, he landed on the river immediately in front of the old Hudson's Bay Store … having heard my report of seeing a photograph of a float-plane of some sort at the town dock at some unknown point in history. GOOD GOLLY Miss Molly! That's one narrow little piece of river and it's going at one helluva clip! With typical dexterity, Bill quickly kicked us around and got us out of town. Yes, CF-VSB is indeed a Very Special Bird with a very special pilot. Thank you, Bill.

Hosted on campus at the University of British Columbia in Vancouver, the 1986 International Trail and River Conference brought together people from around the world to celebrate these natural spaces and to investigate options for protecting their inherent value. (Expo '86 may have simply been a side-bar attraction for some people.) Within context of my aforementioned long story being saved for another time, there exists a short story about a large corporation helping a small conservation group provide some conference-goers with a field-trip to remember. Canadian Pacific Air Lines (CP Air) donated use of an off-duty B737 to our group, *friends of the Stikine*, who agreed to fill it with fuel and supply an operating crew for an early morning sight-seeing flight down the 400-mile-long Stikine River (good guess). Although a number of conference-related pseudo-political complications threatened cancellation of the mission, reports of severe-clear, flat-calm weather all the way to Alaska, made it a no-brainer for the proponents. As luck-of-the-draw would have it, the available airplane turned out to be a long-range model with an extra belly-tank of fuel. Yes, we burned it all, and yes, it was worth every penny.

In the very early morning of June 04, 1986, while climbing northbound in a starlit sky, Customer Service Director Leanne Chambers (Niewerth) and her colleagues handed out information newsletters and champagne breakfasts to an eclectic assortment of adventure seekers from near and far. They were not disappointed … just as dawn turned snow-covered mountaintops pink with sudden sunlight, engine throttles were closed overhead Mount Edziza's volcanic cone for a somewhat quiet cruise across Spatsizi Plateau before arcing over headwater lakes to follow a wild young river running for the sea. With supervisory pilot Garry Grant at the controls and this enthusiastic co-pilot giving running commentary on the PA, we danced effortlessly downstream for two hours in crystal-clear conditions, turning steeply over Grand Canyon walls and sliding softly through Coast Range glaciers at minimum safe altitude (pick a number). Without question, this five-hour river-odyssey was the best flight of my entire life … the one I would choose if I could only have one … the one I would happily do again if I could. The high level of post-flight enthusiasm injected back into the conference by our "customers" confirmed our mission to have been a huge success. For some of us, in keeping with our airline's custom of naming its aircraft, B737 tail-number 720, C-GCPZ, will forever be the *Empress of Stikine*.

Footnotes and Postscripts

1. Thank you, **Ms. Johnson,** a grade-seven teacher at Avon Public School in Stratford, Ontario (c.1957), for such enthusiasm when introducing Stikine and other west-coast rivers into our geography class.

2. Two years after our memorable *Empress of Stikine* flight down the river in 1986, on-board photographer **Gary Fiegehen** introduced me to a Tahltan Elder in Telegraph Creek. As the only person in town to have seen a big orange eagle go by very early one morning, **Henry Quock** was very pleased to have his suspect report verified first-hand.

3. Having contributed to scores of visual presentations and to one fine coffee-table book, hundreds of the river images collected with **Bill Murray** (now deceased) have also been incorporated into a motion picture.

4. A sports-channel television film of 1981, ***Hell and High Water*** features excellent views of Entry Falls while documenting the first-ever technical descent of Stikine's Grand Canyon.

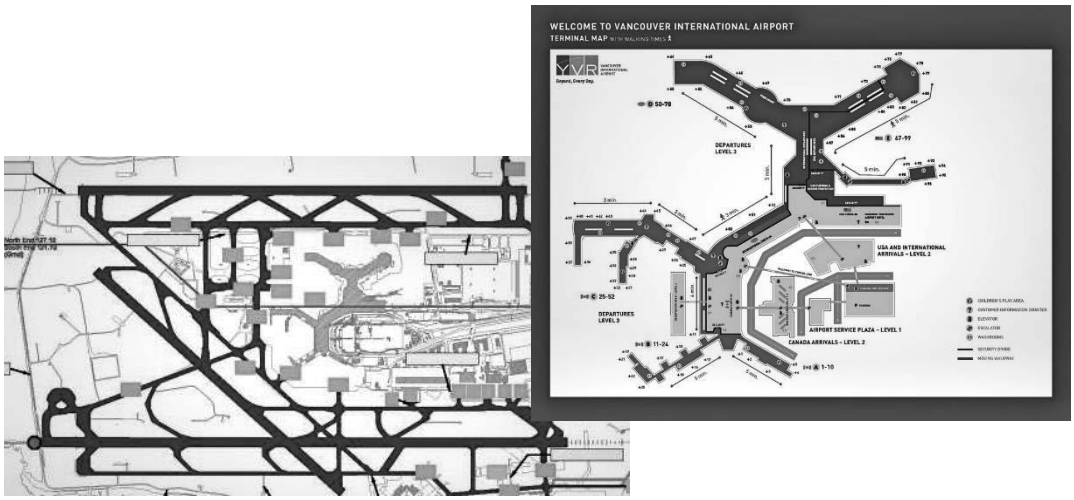
5. Sadly, **Mike Jones** was subsequently drowned when his snowmobile went through lake ice on his trap line.

23

Big D

The immense changes to airline structuring that began during the 1980s continued into the ‘90s. Having previously acquired Eastern Provincial and Nordair, CP Air itself was absorbed by Pacific Western who had already taken over Transair/Midwest. With headquarters in Calgary and a new paint-job, this larger entity began operations as Canadian Airlines International Limited (CAIL). Soon after, long overdue relaxation of governmental control brought about an *Open Skies* mad scramble to consolidate and solidify international routes, particularly in Europe and Asia. At long last, our company could now operate scheduled flights to northern European destinations other than Amsterdam … hello London! In the other direction, we had new opportunities beyond old Tokyo and Hong Kong … Beijing, Shanghai et al. On the domestic front, American Airlines bought a 25% stake in Canadian and initiated a code-share agreement giving us access to more stateside destinations. While skies along the eastern seaboard became even busier, most notable for western-based crews was introduction of one-day return shuttles to Chicago-O’Hare (ORD) and Dallas-Fort Worth (DFW), contributing new variety and additional high-productivity options to the biddable flying list; and, it became possible for those with moderate seniority to reduce their monthly schedule to a disgustingly few days on duty. While a monthly schedule of only 10-12 working days looks good on paper, it does not reflect the fatigue factor or ramifications incurred when the operation goes a little sideways. One such flight, with its several sideways components, makes my list of most memorable airline experiences.

Similar to the shortest-patrol-ever saga from my RCAF days on the Argus, this 737 story begins with a Sunday morning snowstorm; however, instead of an east coast blizzard closing every airport in sight, this was but a small west-coast disturbance that came and went with little notice. In fact, everyone coming on duty at YVR shortly after dawn seemed surprised to see two inches of wet snow blanketing everything in sight, including the wings of every airplane parked at the boarding gates or standing by on the ramp perimeter. Chances are fairly high that both our customer service gate-agent staff and our ramp-maintenance staff were a few numbers short of full complement because of delayed commuters … up the valley, in Victoria, and Kelowna. In any case, it was the weekend and our company had recently embraced JIT (Just In Time), the operating policy whereby people and parts are kept to a sunny-day minimum … subject to enhancement and re-supply on an as-required-basis [insert experienced-based expletive here]. Finally getting ourselves and our customers on board, we put in a request for mandatory de-icing of our wings whereupon we were advised that the new policy and the new terminal demanded all chemically enhanced de-icing procedures now be conducted away from the terminal building, against the perimeter fence where residue is collected through a series of drains. “Roger, copy … standing by for a push back.”

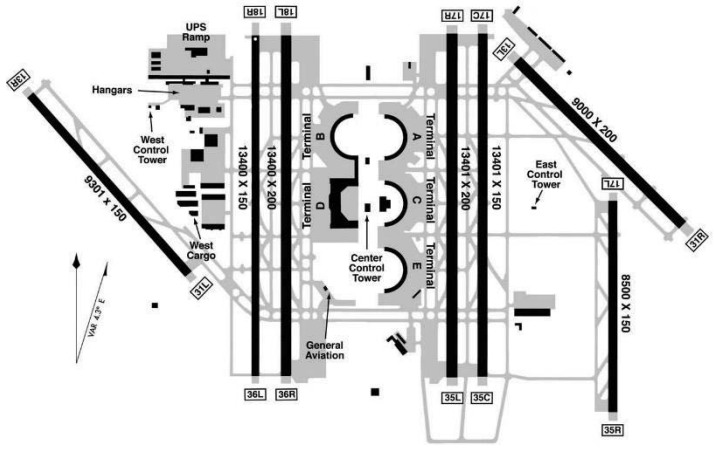


Parked at a gate on the northeast corner of YVR's expansive new international wing, we were a long way removed from the main action taking place on the other side—in the "horseshoes" between primary domestic gates and the international complex. Our follow-up request for push back confirmed the intensity of the situation: hurry up and wait was our only option. About fifteen minutes after our second call, our spirits were lifted by arrival of a small tug to push us back … here we go … kinda, sorta. Though soon pushed back to the designated area near the fence, we still had a long way to go time-wise: though first in line for de-icing at our location, we were located at the far end of a long circuitous route extending from the main event where minimum resources were attending to numerous large airplanes destined for mainline Transcon and primary international destinations. More hurry up and wait … a mobile de-icing unit will be dispatched ASAP. "Sorry folks, everyone is doing the best they can under the circumstances … we'll have you underway as soon as we can."

Memory suggests we were at least an hour behind schedule when we finally departed Vancouver with our shiny clean wings … so far so good. However, two hours later, when "Fowuth Senna" (Fort Worth Center air traffic control) began issuing speed reductions three hundred miles back, we knew the situation at this major hub was more complex than usual. Sure enough, a rapidly moving weather system off the Gulf of Mexico was giving DFW (Dallas / Fort Worth International Airport) more of what it was famous for—thunderstorms with torrential downpours and extremely high winds causing dangerous downbursts as well as significant horizontal wind-shears in both speed and direction. Sure enough, we were the first airplane in our conga-line from the northwest to be given instructions for a holding pattern. No, we were soon not the only ones flying around in circles and watching fuel consumption suck us ever closer to Bingo-time; but, yes, less than an hour later, we were the first airplane in our sector compelled to depart the holding pattern with clearance toward our alternate airport, Little Rock, Arkansas (LIT), with sufficient fuel to get there plus the mandatory extra amount in case something else went sideways. While it was reassuring to be heading for a suitable airport with good weather, it was not comfortable flying through the same frontal system that had very recently caused havoc at our scheduled destination. Heading northeast, we endured continuous light turbulence with lengthy periods of moderate to severe. It was extremely rough and uncomfortable. "Sorry folks, the elements are against us … thanks for your understanding … we'll get some gas and get you back to Dallas as soon as possible."

Getting gas was not a problem. Getting out of Little Rock was. Unbeknownst to conscientious planners in our Flight Dispatch there was nary a sign of any B737-compatible tow-bar anywhere around LIT Adams Field [later Hillary and Bill Clinton National Airport]. While it was easy enough to taxi directly onto the gate with guidance from signage and a ground attendant, it was impossible to be pushed back from it without a proper tow-bar. At some gates at some airports, there is sufficient room to taxi away with an immediate tight-right turn when the bridge is motored well out of the way. Not so here: our only option was to start the engines and back ourselves directly away from the building by deploying our buckets and employing "sufficient" reverse thrust with our JT8Ds. Sure enough, the tarmac was littered with detritus (gravel) and the nearby terminal building was a wall of glass. Fortunately, no windows were broken and forward motion was achieved before applying wheel brakes, thereby avoiding the indignity of falling backwards onto our rear-end. Without further delay, we departed Little Rock and made our way to Dallas-Fort Worth by flying (bouncing) back through that intensely turbulent frontal zone. "Welcome aboard, Canadian," declared Dallas Ground Control, "take the first taxi-way on your left … join that line of traffic and shut down your engines … we'll call when your gate's available."

Golly, gee whiz. This was more than we bargained for … and it got worse. In fact, by watching and listening for more than an hour, it was obvious that the terminal building had become a zoo where chaos was near at hand. That day's recent weather event had grounded many flights at the terminal while sending many of us off to our alternates; any available gates had been quickly seized by flights squeaking in immediately after the storm passed. Moreover, contrary to its fiscally prudent ideals, the chickens of JIT had come home to roost: the airplanes and crews at the gate did not necessarily correspond with those scheduled by efficiency-minded computers. Some particular aircraft types and some particular crew types, and some of both, were missing in action or inaction … enroute from alternate airports or parked on local taxiways. DFW was close to gridlock: the terminal building was overflowing with customers and crews without an airplane, and the taxi-ways were plugged with customers and crews who couldn't get to the terminal. Thankfully, the cacophony of "corrective communications" among airport staff and airline schedulers inside could only be imagined. Meanwhile outside the building, VHF communications from some stranded airplanes took on a disrespectful edge bordering on the profane, particularly from small commuter airplanes that had also been to their alternates and back, and were now sharing the same fate as ourselves … but without so much as a porta-potty onboard. With our APU providing electricity and air conditioning, we were as comfortable as we could be sitting out there in the middle nowhere. "Sorry folks, the situation is beyond our control … thanks for your patience."



When finally getting to our gate and having a look inside the terminal, it was easy to see why the authorities were restricting access: people and baggage were everywhere; floor space was almost non-existent. Soon after our inbound customers and baggage had finally been offloaded, we made a very serious discovery—the flight home to Vancouver would take us almost one hour beyond our maximum allowable duty day of fourteen hours. Oh boy, some decisions are easier than others and this wasn't one of them. Although strict adherence to published rules had seldom got in the way of completing a successful mission, this situation found us with feet on the ground and paper in our hands far in advance of the established deadline. If we got our customers to Vancouver without incident, we could expect a slap on the wrist or other minor comeuppance from our union. On the other hand, if a tire blew on landing, we would be in deep doo-doo with the union, the company, and with government regulators. Should anything untoward happen to this flight, we would be held entirely responsible for everything and anything. As much as we thought it possible to get our customers safely to destination, we were confronted by nagging negatives: any further significant abnormality, such as an engine failure and/or diversion, would put a lot of paperwork on our desks and probably put our careers on the line; furthermore, five hours hence, our judgement levels may have deteriorated sufficiently to threaten flight safety, the primary reason for us being there. Ultimately, the decision was mine and mine alone. I cancelled the flight.

Giving the bad news to Company Ops at home and to Base Ops here was an unwelcome task; informing a room filled with very disappointed air travelers was the worst. After waiting for their baggage to be offloaded by severely overloaded ground staff, we consented to a request from Base Ops (American Airlines) to taxi our airplane to its overnight parking spot: it was the least we could do after becoming extra burden on a system that was already short of equipment and people-power. It required 30 more minutes of engine time to find our way into a previously unknown hangar complex located somewhere near the edge of the universe, over yonder by the west control tower, seemingly in the adjoining county where we waited (and waited) for a taxi cab to delivery us to a nearby hotel where we waited in line with many of our very disappointed customers, all looking for any available room. Ironically, though now well removed from flying duties, our duty-day had come remarkably close to the 14-hour maximum.

The following day began with an early cab ride back to our airplane and an easier daylight taxi to our gate at the terminal. The flight home was routine with no subsequent administrative fallout; we had done what we had to do as best we could, and that was the end of that … almost. Every now and then, my aging brain attempts re-analysis of that bygone predicament, acknowledging of course, that, had we been more promptly de-iced and departed Vancouver closer to the scheduled time, there would probably not have been that particular predicament; we most likely would have made it into DFW before the storm and been enthusiastically pushed out as soon as practicable after it … arriving home with hours to spare in our duty-day limit. When contemplating the relative merits of new terms *acceptable safety* and *corporate productivity*, some old axioms come into play—especially the ones about discretion and valour, about old pilots and bold pilots, about sked being whenever it happens, and about some of the best flights being the ones not taken. Valid as they all might be, there has long been lingering regret about not getting those folks where they wanted to go that Sunday night a long time ago. Then again, maybe that duty-day regulation had served its proper purpose: fatigue is known to be an insidious monster, and who knows … that night might have been the night when my personal good fortune finally took some well-deserved time off … let it be, Peter.

24

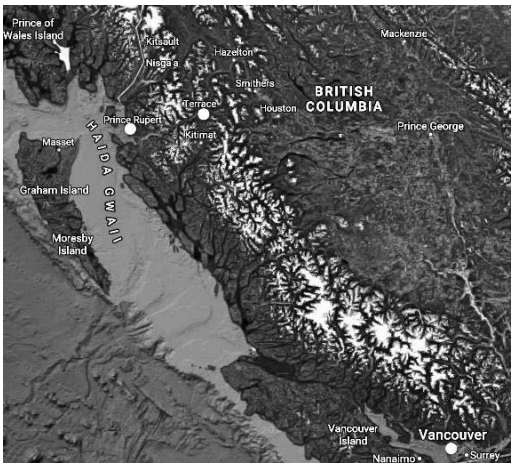
The Coast

Evolution of Canadian Airlines International and its code-sharing agreement with American Airlines as part of a *One World* global entity during the 1990s brought new destinations and new route structures for pilots on every airplane type. While domestic-types had almost unlimited range around North America, western-based 737 pilots also had access to more specialized operations that were close at hand and never far from mind. Having previously merged our traditional routes with those of Pacific Western Airlines, there was now a bigger team and a bigger network serving every northwestern Canadian community having 5,000 feet of runway, paved or otherwise. Furthermore, the *Call of the North* soon prompted some former CP Air pilots to change bases for the opportunity of operating B737 passenger-cargo "combis" in the high Arctic: the idea of full-time flying into remote gravel strips was appealing

A gravel deflector "ski" on the nose gear and gravel dispersing vortex generators under the engine intakes identify the 737 combi which has a forward cargo door and an aft air-stair on the port side.

With or without a gravel-kit, Boeing's 737-200 is by far the best aircraft to have ever flown these northwestern routes. The airline owners and their operations staff must be commended for this airplane's unparalleled success. The only sad blemish on its otherwise sterling record occurred at YXC Cranbrook on a dark winter's night in 1978 when poor visibility and poor communication contributed to the loss of one airplane and forty-two lives. After touch-down and initiation of reverse thrust, the crew attempted a go-around to avoid an unsuspected and unsuspecting snow plow on the runway: they narrowly missed the snow plow, but didn't get far. The clam-shell thrust reverser panels on one engine failed to retract before they had become airborne; with landing gear extended and wing flaps still in retraction, they didn't have a chance. It wasn't the airplane's fault, and we can't really blame the pilots for trying: on a longer runway in less threatening circumstance, they would have had more success. If the snow plow driver had been less conscientious and absent, the 737 could have splashed down in two feet of snow without any problem. After the shock wears off comes realization that, given the operational environment, it could have happened to any of us, in similar or slightly different circumstances, at any one of many similar airports.

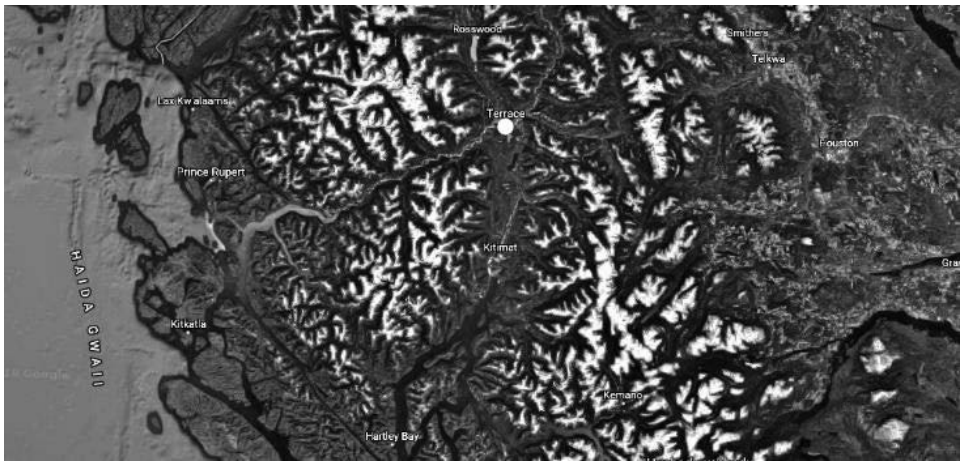
Although painful to contemplate, this solitary disaster does bring the airplane and its operation into focus. Thirty years of continuous service with countless take-offs and landings on short runways in unforgiving terrain and harsh weather … unfamiliar challenges in remote situations was the norm. Although pilots certainly wrinkled some skin with necessary short-field landing techniques, it is a blessing that no other airplane was bent or broken during that 30-year period in the northwest. Our 737's track record throughout the remainder of North America and the Caribbean is spotless.



Down in the south-western corner of CP Air's original BC District is a semi-detached subdivision commonly known as *The Coast.*

Prior to the addition of YYD Smithers and YZP Sandspit through amalgamation with Pacific Western Airlines, two stations, Terrace (YXT) and Prince Rupert (YPR), were usually served by triangular loops flown out of Vancouver. Although this isolated triangle might look like a side-bar to the greater route structure, it has always been more than that. Containing original routes serving two long-standing communities, it can be regarded as a study area wherein decades of experience with coastal weather has over-ridden all logistical experiment—a geo-climatic mixing zone where scheduling fantasy invariably succumbs to natural reality. These two communities are in their own zone … a zone as multi-dimensional and unpredictable as any could be. To serve these stations without exposing the airline's greater route structure to excessive dysfunction, *The Coast* air-service was traditionally conducted in a somewhat isolated and dedicated manner. These routes were not separate, they were just special.

Prince Rupert is a very pretty place when you can see it. After drifting down the Skeena River on one of those really good days, we often get a good look at the picturesque town-site while cranking a tight visual approach onto its one short runway, over on nearby Digby Island. On normal good days, an ILS approach often provides a bumpy ride down to the cross-wind landing practice area. On foggy-bad days, it's usually a waste of gas to even try. On those nights of exceptional interest, it is like doing a glassy water landing on a bucking aircraft carrier in a raging hurricane; engine thrust reversers and anti-lock wheel braking systems are routinely tested to the max in YPR. Ironically, the on-shore "breeze" usually prevents excess water from draining seaward off the cleverly canted runway surface. Departure in any kind of weather is usually better than risking the ferry ride to town for an overnighter: although the delightful small-water cruise to the town dock is not hazardous in itself, being separated from one's airplane for any length of time in this mix of climate and topography creates unforeseen vulnerability. In a surprisingly short period of time, freezing rain associated with an advancing weather system can turn the runway into a skating rink and render the airport useless; as thousands of air travellers can attest, the resultant organizational delay and the three-hour stranded-passenger bus ride to Terrace is not particularly inviting, especially if arrival at YXT coincides with arrival of the advancing weather system and the entire valley is filled with fog … the sound of the long-anticipated escape airplane accelerating away on missed approach to its alternate destination of Prince Rupert does not drown out all of one's inner screams. Oh well, back on the bus and back to Prince Rupert we go … well almost; heavy rains and a flash flood have washed out a section of Highway 16, the one and only road, which is now closed for an anticipated 3-5 days. Oh well, when caught between a rock and a foggy place, head for the nearest town and hope for an available room … good luck. Ergo-therefore-thus, for wise flight-crew members huddled inside a small terminal building on a small island up the coast, the old maxim "git while the 'gitting's good" refers to the advisability of getting outta rainy old Rupert before a dry desk in a warm room somewhere down south comes up with Plan C.



Tucked into the end of a long valley at the end of a very long fjord, the town of Terrace and its adjacent Terrace / Kitimat airport inhabit a small space that could be defined as a microcosm of complexity within a zone of overwhelming multi-dimensionality. On the good days, it's a broad valley lined with green mountains capped in glistening snow; on the bad days, it's a boxed canyon of confining granite walls filled with life-awareness lessons for the unsuspecting airman, whence cometh a Terrace-truism: "On the good days, it's a shame to take the money; on the bad days, you can't pay us enough." Love it or hate it, Terrace demands respect from all who venture in; and while some never return for a second visit, some pilots have difficulty resisting the place.

Always a willing teacher, Terrace continues to offer learning experiences to all pilots … even to experienced pilots … even on the good days. For better appreciation comes this brief background: Many pilots, once familiar with their machine and its operating environment, gradually but inexorably refine their personal enroute descent technique in the interests of fuel savings, passenger comfort, and their own *je ne sais quoi* search for perfection. Unbeknownst to many outside the cockpit, jet transport throttles are usually fully retarded, completely closed, as in power-off, when commencing descent toward destination (except when engine bleed air is required for anti-icing systems, in which case a flight-idle detent in the throttle quadrant is used to ensure adequate engine heat). Factoring in an estimate of wind effect, the well proven 3:1 ratio whereby an airplane in cruise configuration travels three nautical miles for each 1,000-foot decrease in altitude, it is possible to overfly many on-route altitude restrictions and avoid stepping-down with otherwise necessary thrust and attitude changes. In lightly controlled airspaces, this technique is ideally intended to reach the lowest minimum altitude closest to the landing runway before requiring the addition of engine thrust. If found too high and too close, raising the speed-brakes and/or lowering the landing gear earlier facilitate return to the comfort zone. Advancing the throttles to flight-idle detent inside (past) the final approach fix is commendable; saving such need until over the approach lights is considered masterful by some people. While rumour has it that 737s were successfully *dead-stick* landed without engine power on longer Transcon runways, it would have been fool-hardy to attempt such a thing on short BC District runways where the 5-10 seconds required for engine spool-up to effective reverse thrust could be life-threatening. Moreover, such foolhardiness was forbidden by company SOPs (Standard Operating Procedures).

So, here we are, enroute to Terrace on a fine spring day, re-entering the lower atmosphere at 350 knots in a power-off glide carefully calculated to reach minimum crossing altitude precisely over Big and Little Herman, isolated knobs of higher terrain just south of the field, for a straight-in northbound landing in reportedly light and variable winds. Looks good. Hmm, methinks the high Cirrus cloud off to the left must be leading edge of the forecast Pineapple Express (a warm and wet Pacific weather system with strong south-westerly winds). Meantime, an early approach clearance from YVR ATC allows for cutting the Kitimat corner with a more direct route up the valley. Hmm, it seems we now have a tailwind … and it doesn't seem to be losing much strength with decreasing altitude …. Golly, gee-whiz, even with gear and speed-brakes extended, we're not going to make it down in time. In such instance there is little option but to hang up one's hubris and get on with the next best thing: *Speed-brakes Down; Go-around Thrust; Flaps 15; Gear Up.* With light and variable wind, we'll just swing north over the river and land southbound … nuthin' to it: *Gear Down; Flaps 40* … Golly, gee-whiz! What's happening? We're too high and too hot; we're not gonna make this either: *Go-around Thrust; Flaps 15; Gear Up.* Back south we go for a split-ass turn over The Hermans and a successful, so to speak, landing on the northbound runway as originally planned. So much for saving gas. I hope I didn't cause my airline to go broke.

So, young man, what did you learn at school today? Well, Sir, while being reminded of perfection's continual need for interpretation and for my own eternal distance from whatever it might be, I received close-up introduction to the incredible power of *katabatic winds* cascading down mountainsides from high-elevation ice-fields and glaciers. Yes, generally known as the fair-weather *outflow* that produces surface wind directions contrary to the expected norm when stirring coastal inlets into extremely agitated states during otherwise calm conditions, they have been clocked at more than 80 mph in the extreme. It seems my errant descent profile took me where I would not otherwise have gone. I mean, how often does a pilot in his right mind overfly an airport with virtually calm winds to land in the opposite direction … away from his parking spot at the north-end terminal? Long accustomed to observing sea-level effects of outflow, I had never considered the possibility of wind-surfing one such wave in the Skeena River valley. Interestingly, while this surface-level laminar-flow rushed downriver very close by, the airport wind sock exhibited little interest, being slightly above and beyond such things.

Wind "events" are unavoidable facts of life for aviators everywhere, and while severity quotients might vary according to aircraft type, their excitement factors are probably all quite similar … though maybe fuelled by differing ratios of fear and excitement. Although it helped motivate a slight increase in my heart rate while dealing with an embarrassing failure, the invisible push-from-behind over the Skeena River did not cause violent disturbance of the flight profile: it felt like we were riding on a bubble that wouldn't deflate. By contrast, landing on that same runway, one dark and stormy night, we experienced an attention-grabbing instantaneous 25-knot loss of airspeed while close to the ground in marginal visibility with full flaps and gear hanging out … a high-anxiety wind-shear awareness-event. We had flown into a *waterfall* of air flowing over the river-bank cliff-face from a very strong southerly wind. We are most fortunate to have been flying with the SOP-recommended wind adjustment added to our targeted threshold speed for landing.

On a lighter note, an annual proficiency check-ride took us into CYZP Sandspit on Gwaii Haanas (Queen Charlotte Islands) where extremely strong winds (50-60 knots) saw us use less than half the length of its 5,000-foot runway while landing with less than full flap. So far so good; however, because the wind speed was above the 40-knot maximum for operation of our electrically powered entrance air-stair, it was necessary to have one of those old-fashioned ground-stair units rolled up to our front door for deplaning passengers. So far so good; however, because of wind action on its elaborate side panels, the ground-stair required the assistance of three (3) ground-service personnel to keep it from blowing away and/or damaging our airplane. So far so good; however, with half the airport staff manning the ground-stair, there was little person-power available to unload baggage. After advising there would be no outbound customers boarding because the connecting ferry was wind-bound across the channel in Skidegate, Base Ops YZP suggested we take off and not come back … at least not until the wind speed had dropped below 40 knots.

A lengthy relationship with the B737 airplane continued to provide intermittent experience with BC District until the closing years of the twentieth century when pursuit of other personal dreams and the impending airline *merger* with Air Canada caused a shuffle of priorities. In the process, my ever-advancing age and decreasing seniority number allowed for one more special flight in the district: being the most senior (oldest) pilot to bid for it, I gave myself the honour of operating the airline's very last scheduled 737 flight through Terrace and Prince Rupert in 1998. Although there was no announcement or formality attached to it, the significance of this last 737 flight was readily seen in the softened eyes of the station agents up there: from shut-down to start-up, the entire operation seemed to be filled with emotional retrospection around the occasion and its historical context. For reasons difficult to define, sentimental and otherwise, it was as sad for them to bid our airplane adieu as it was for us to leave bush division behind … it's where our airline is rooted and where its first routes sprouted … a region where legendary characters created a unique air service in a remote and challenging environment, and where their jet-age successors operated a vital division within the complexity of a first-class international airline. As well as the opportunity to take airplanes and ourselves into that narrow, yellow band approaching the red line of maximum allowable limits, BC District had given many of us a down-home sense of place along with life-enhancing membership in its smoothly running team. Although our airplanes changed colour over the years, *the district* survives as a very special place—a small area filled with big memories.

Unbeknownst at the time, a subsequent one-year leave of absence followed by several years on the B767 would see my airline career happily end in unexciting fashion without any aircraft accidents or incidents on the books (administrative events are in another category). Though this largest segment of my aviation career had included experience on six different aircraft types, much of it was devoted to one in particular. Good guess: fully two-thirds of my career, 22 of 33 years, was occupied by the little orange jellybean of an airplane that first attracted my attention in Prince George during the summer of 1969. Unbeknownst at the time, the Boeing 737-200 would take me far and wide while becoming my all-time favourite airplane ever flown. Similarly appropriate, the topography that got me there in the first place became my hands-down, anywhere in the world, all-time favourite route to fly: Vancouver to Whitehorse and back, directly over the Coast Mountains of British Columbia. When first introduced to its geography, it was impossible to predict the large slice of life it would define, or to imagine the immense level of satisfaction gained from working within its realm. Thanks to everyone up there, BC District was the best.

Where were we?

RCAF Golden Hawks c.1962

Canadian Airlines

Ah yes, immediately after our northbound departure from Terrace on the last 737 flight in BC District, F/O Steve Richards deftly executed a tight-right 270-degree turn over the Skeena and overflew the airport (at minimum safe altitude) while setting course downstream to Prince Rupert. As Steve gave a brief wave to a flight-line of sentimental team members waving from the terminal apron, I became smitten by the joy of flying an impromptu airshow in honour of our aviation heritage … Uh-oh! The tight formation of Golden Hawks seen entering from the west is actually a flock of Canada Geese aiming to enter our front windows. Look out! That was close. Could these have been legendary logo-birds from the original company hat-badge flying in to help celebrate the occasion? Happily, we avoided the geese … and a captain's report I would not want to write. After a similarly inventive departure and overflight at Prince Rupert, our farewell tour of the coast ended without further excitement. However, to ease the pain lest there came complaints about irregular operations up-coast, Steve and I paid a visit to the chief pilot's office with our confession. "Sounds like fun," said Rod Ellis; "I wouldn't have expected anything less."

Footnotes and Postscripts

1. **Rod Ellis** had flown as T-33 Red Knight with RCAF's 1967 Golden Centennaires formation aerobatic team, (forerunners of the Canadian Snowbirds), before flying lead in the Ray Ban Gold civilian aerobatic team.

25

Raven

This is a difficult chapter to write. Perhaps it was a difficult chapter in my life … as difficult as it is to define difficult. "Nobody said it would be easy," comes this oft-repeated reminder from my father, usually delivered in humour. Yes, like those ten-minute tasks around home that become multi-day exercises in parts acquisition and unplanned reconstruction, some straight-forward-looking paths in life become convoluted routes through the unknown, and the final destination is not always the one on the flight plan. Although, this is one such case, there is no complaint intended: despite occasional turbulence, aviation-career journeys are usually easy to take.

The day after attending the 1999 gathering of *bald eagles*—an annual symposium for former CP Air pilots—I found myself inhaling the sights and sounds of Delta Air Park, a small grass strip south of Vancouver, where the ambience rekindled ancient memories of early flight: there is nothing quite like the blend of newly mown clover and fresh cut Avgas; and there is no sight quite like the forward view from a T-6 tail-dragger. Although we didn't take *Fish Lady* flying, Tony Swain kindly offered me a re-familiarization sit in his hallowed Harvard. Perhaps it was the enigmatic scent of engine oil mixing with paint, rubber, and leather in the old beast that caused my swoon. In any case, I was suddenly smitten once again by the simple beauty of an ancient airplane; and with it came fond recollections of flying for fun. There is a difference. Although airline flying is enjoyable when approached in the proper manner, it is not usually an exercise in gay abandon: it's a pleasurable form of employment, but it is still work. As most well-meaning mavens are quick to point out, *driving* is what airline pilots do—*flying* is what real pilots do upside down. While late-career seniority allowed the pleasure of *operating* as a senior Captain on my favourite B737 aircraft, the job description came with clearly defined aircraft attitude limits. (Fortunately, the flight simulator did not.) Perhaps the experience of growing old in the twilight of a disappearing millennium causes some veteran pilots to hallucinate: although compulsory retirement from my airline job was fast approaching, I was not anxious to give up flying any time soon. Maybe what a fella needs is an inexpensive little home-built for flying upside down every once in a while …

The very next week, while stretching my legs during an Ottawa turnaround with the 737, I wandered into an executive aircraft lounge and picked up an airplane *Buy and Sell* magazine in idle curiosity … also known as preliminary search for an inexpensive upside-down airplane. Although there were few upside downers and absolutely no inexpensive aerodynes listed in this Executive Edition, there was, however, notice of a liquidation auction occurring the very next week in Phoenix, Arizona that included a low-time Canadair T-33 *Silver Star*, modified with an internal nose camera mount remotely-controllable from the aft cockpit. Eeehaww! Finally, here was the long-fantasized aircraft necessary to fulfill a long-held dream. In retrospect, a more fitting exclamation might have been uh-oh!

In any case, let's rewind several frames to bring the story into perspective. Beginning with my first trip there, in 1979, the idea of filming the entire Stikine River by air has been with me. Even then, many of my 35mm photographs presented a subjective downstream view of the river … almost unavoidable in a canoe. However, the seed was well planted. More than a dozen subsequent visits, by land, sea, or air, carried this not-so-hidden agenda: with patience from fellow paddlers and the friendly assistance of Bill Murray (CF-VSB), thousands of images captured all segments of the Great River, from meltwater in a glacial cavern to tidewater channels at its mouth. Arranged in natural sequence, this series of photographs presents the entire river flowing downstream as one continuous unit; and as such, was seen as a storyboard outline to assist the overall filmmaking process. Unsurprisingly, the finished product, the real film, was envisioned as a high-speed, low-level flight downriver by a real airplane with a real camera accompanied by an appropriate musical soundtrack; and of course, IMAX was already the format of choice. Given that the downriver-flight concept had already been developed elsewhere, the idea of including basic aerobatic manoeuvres was seen as a way of adding subtle drama to our film while sharing the freedom of flight. The simplest and least expensive way of getting there was immediately seen to be one man with a camera-equipped aerobatic airplane … something like a T-33 jet trainer.

As you may surmise, it wasn't quite that simple. The 1980s decade, during which the majority of these river images were collected, also contained numerous "distracting" elements: marital breakdowns and numerous habitat relocations were major themes in a colourful collage of fast-paced activity; several aircraft-type reassignments, two changes of operating base, and one upgrade to Captain status provided ample ground school and simulator practice along with some paperwork; becoming chairperson and chief newsletter writer for *friends of the Stikine,* our conservation group (FOS) added significantly to the paper file. Moreover, it was gradually becoming obvious that filmmaking is a full-time job and this would-be filmmaker didn't have enough time to go around.

The 1990s saw collection of additional river images in conjunction with continuing conservation efforts. Although the river's primary threat disappeared with cancellation of BC Hydro's mega-dam proposal, there remained numerous outstanding issues that challenged the long-term health of the watershed; and as such, my schedule included an ongoing series of "advisory committee" meetings in Dease Lake and Smithers as FOS representative. Alongside the extra-curricular activity, life at the airline remained fairly stable with amalgamation of CP Air and Pacific Western into *Canadian* which offered pleasant working conditions on a variety of routes for a semi-senior B737 captain. A less hectic schedule was allowing room for overdue research on the Stikine River film idea—the dream was still alive when I picked up that aircraft Buy and Sell flyer in Ottawa.

The discovery of a camera-capable T-33 being available at auction initiated seven days of intense questioning, within and without. When apprised of the situation, Beaver-buddy Bill Stewart was soon on board. A fellow pilot and paddler, he was also a part-time filmmaker who had understood my T-Bird vision of the Stikine movie from the get-go; although busy with other projects, he had shared my fantasy vicariously for twenty years. Despite being currently well occupied by a land development project near Kelowna, Bill agreed to be responsible for the financial side of a partnership while I took care of the airplane and its maintenance requirements. Done deal! Onwards and upwards!

In retrospect, the auction at Thunderbird Aviation was a bit of a gong show. Bill couldn't attend because of his responsibilities at home, so I was front and centre for the bidding process. Whatever my abilities as an airplane driver might be, my capabilities as a businessman are not worth discussing. By that point in time, my fantasy had the airplane gods and the film gods on my side, and there was no turning back: after making the Stikine movie, we would spend the rest of my life flying and filming every river in Canada. Of course, the auctioneer and the vendors saw me coming and did what they're good at … and they were really good at it. On June 11th 1999, this would-be pilot-filmmaker was the "lucky" highest bidder on a 1956 Canadair-model T-33 registered as N83TB. Being an inexperienced wannabe far removed from the world of general aviation and never close to the reality of commerce, I paid too much for the airplane; but it now belonged to us, and film royalties would soon balance the books … *n'est-ce pas?* With its USAF certified altimeters and airspeed indicators, our silvery gray bird was already qualified for chase plane and calibration work as well as for aerial photography. Here we go! Leaving N83TB high and dry in the southern desert for minimum storage fee, a long-planned canoe trip took me to the Turnagain River in northern British Columbia, just north of Stikine—a timely opportunity for thinking about what might happen next.

By time of my return from the bush, partner Bill had come out of the woodwork with time to address our fledgling enterprise. Through a string of contacts never fully understood by me, he had met up with Rick Milson—a former US Navy fighter pilot with experience in Vietnam and with the Blue Angels aerobatic team—who had hangar space at Boeing Field (BFI) while being part of the corporate aviation scene in the Seattle area. By the time I met Rick, he was already a third partner in our T-Bird venture which was now pursuing a photo-capable chase-plane contract with Boeing Corporation. It was not exactly what I had in mind because I hadn't yet come up with a plan; moreover, Rick seemed to know about such things and seemed to think our chances were pretty good. The Stikine film could wait. Getting N83TB paying her own way was seen as a good start to a long relationship … and flying chase-plane formations in a T-33 seemed like a fun thing to be doing. While Rick and Bill created an LLC (Limited Liability Corporation) through which to do business, my initial energies went into corporate identity. With business cards and a Website, we went to work as *Raven Air Photo.*

On schedule and according to plan, our bird *Raven* was delivered to BFI, courtesy of pilot Bill Wall and engineer Ron Rodman, and parked inside Rick's hangar which also housed our new corporate office. I was soon also parked in the company hangar where I was busily occupied for most of every day and where I spent most nights … sleeping on a foamy from the box of my pickup truck. Wow! Questions about shared intimacy and meaningful relationships take on a different slant when you're sleeping with an airplane.

To entertain any hopes of landing a chase-plane contract, we needed a fully functioning camera mount in a fully serviceable IFR-certified airplane. We had neither. All we had was a company name and a ton of unfinished business. Prior to becoming *Raven,* our Canadian-made bird had undergone significant modification to her former air force persona: her sleekly attractive nose cone had become a flat, sawed-off lens-plate fronting a compartment intended to house a 35mm motion picture camera for use in the filming of *Top Gun.* While she didn't make the cut for that performance, her forward equipment bay had been substantially altered to accommodate the sturdy-adjustable camera mount. Along with equipment relocations came necessary electrical rearrangements to facilitate camera operation from the rear cockpit; and being a 1940s-era minimalist layout to begin with, this aircraft's electrical system was well stressed toward limits. Moreover, munition trials and related experiments at Lockheed Martin's *Skunk Works* had further helped to "cross her wires." In short, N83TB was a can of worms … and we had precious little in the way of up-to-date diagrams for sorting it out. Every day and many evenings over many weeks saw *Raven* and me together, being attended by engineers and electricians in hopes of making something happen.

Things did happen, but seldom for the better. Failed fuel pumps and blown fuses were but hiccups in a long process that found me dealing with unfamiliar system responsibilities such as oxygen supply, ejection seats, and parachutes, all requiring paperwork certifications as well as hands-on attention. While engineer Rodman occasionally came up from Phoenix to deal with the big-ticket items, the electrical conundrum was mostly in the hands of local engineer Marshall Beck who sweated through trying conditions that might have caused others to cash in their chips. With valuable assistance from on-field FBOs and avionic shops, we finally got our ornery bird into flying condition and summoned our pilot-guru, Bill Wall, to supervise my type certification. A T-Bird connoisseur with military and airline background, Bill made certain I was up to speed—on the ground at least—with a customary multiple-choice paper exam as well as oral challenges to abnormal and emergency procedures. In anticipation of our first test flight, I had purchased an old USAF one-piece flight suit and splurged for a brand-new "bone-dome" hard-hat flying helmet with the slide-away visors, microphone options, and oxygen mask attachments, which, in true jet-pilot tradition, soon sported a personalized identification label. With appropriate ambiguity, the initial perpetrator of all this action was henceforth known as the *Raven One.*

Engine start was a rush. The excitement of new uncertainties mixing with old memories brought a warm purr to my heart in keeping with our *Nene 10* engine's soft whine behind. Taxiing without nose-wheel steering for the first time in many years revitalized the old fear of "cocking" the nose-wheel and thereby having to humbly ask for outside help … fortunately, not today. For the first time in twenty-five years, I was soon airborne in one of my most favourite airplanes … off Runway 13L in an immediate left turn to avoid controlled airspace at nearby Renton. My apprehension about re-adapting to the T-Bird's directly rigged flight controls disappeared the instant I noticed my airspeed indicator rapidly returning toward zero—it had failed completely. "You have control" was uttered in an abnormally urgent manner and Bill returned us safely to BFI King County Airport within a matter of minutes. The fact that he was never totally open about the state of his airspeed indicator is of no particular concern because he probably wouldn't have needed one anyway.

With perseverance and additional assistance from on-field specialists over several more weeks, we finally got ourselves up to IFR standards by passing FAA inspections for integrity and accuracy of our pitot-static system while concurrently bringing our electrical system up to snuff … well, almost. As we attended to aerodynamic issues, two of Rick's friends—legitimate electro-wizard boffins—worked at bringing function and control to our stubborn camera mount. In due course, Bill Wall had me airborne for test and familiarization flights leading to my official certification. I confess to a moment of temporary temerity when he first instructed me to roll upside down and pop the boards before pulling through a bottom-half-loop from a mere 5,000 feet … no sweat! Closed-pattern touch-and-goes at nearby Paine AFB (KPAE) were a delight, as was a low-level photo-run mission along Highway #20 through the Cascade Mountains. With a new FAA *Experimental Aircraft* Commercial Licence in my pocket, I was soon flying solo with rejuvenated joy. Being upside down over the Cascades and hearing familiar call-signs following the *Acord 6* arrival into Vancouver had me thinking I would never be back with the airline.

Think again! With barely ten hours together, *Raven* and I were done. Preoccupation with aircraft matters had allowed me to miss the hard truth of our deteriorating financial state. Original partner Bill Stewart had over-extended himself money-wise and time-wise to such a degree his land-development partnership in Canada had fallen apart and was suddenly into legal wrangling. Bill could no longer cover the high monthly costs of our aircraft loan payments and hangar fees. Partner Rick had meanwhile become deeply involved with an engineering firm developing new winglets for Boeing aircraft, and he was becoming less enamored of our slow-moving enterprise. Furthermore, in attempting to refinance our operation, Bill had stretched his friendship with Rick beyond limits, and Rick was not about to forgive us the $5,000 per month in hangar rental. We were already pretty much done when the creditors came to take away our airplane. So much for chasing dreams in a chase plane. Raven Air Photo was a RAP (pun intended).

There remained no option but to drive my truck back north with my tail between my legs. *Raven* our *raison d'être* T-33 had been repossessed by the creditors and Raven Air Photo was no more. Financial mismanagement had removed any hope of a chase-plane contract or other means of making our bird and our business sustainable; so too went my dream of flying and filming the Stikine River in a camera-equipped T-Bird. While disappointed, I was not distraught. A recent visit to Boeing's long-established chase-plane operation had helped me realize what dreamers we had been. Compared to that highly polished organization with its up-dated T-33s and supersonic T-38, we were pure bush-league wannabes. Having lustfully jumped on the bandwagon to more attractive flying, I can't blame anyone else for initiating the action. Hindsight suggests we three partners had arrived with three slightly different dreams, and we probably should not have been there in the first place. Now, the sorry state of my credit line and charge card statements suggested it was time to do some productive work.

26

The 767

"Welcome back, Pete!" exclaimed the crew planner at Canadian Airlines. "Air Canada is going to announce the takeover any day now and I suggest you get your ass back in a seat."

"Okay by me, where do I sit?"

"We had an equipment bid while you were gone, and according to the contract you can fit back in wherever your seniority will allow."

"Okay by me, how about Captain 747?"

"Nice try; they've been gone for ten years. How about Captain 767?"

"Okay by me, when do I start?"

It wasn't easy, but it could have been worse. My sudden insertion into a training program that was being compressed and accelerated by the impending corporate merger brought awkwardness all around. For one thing, my one-year free and easy existence in self-employed Lala-land left me a bit low and slow on the airline's learning-curve machine. Changing airplane types within an airline is normally no big deal: although the numbers differ, the language and procedures remain essentially the same. Cross-training from a narrow-body 737 to a wide-body 767 would present interesting adjustments to engrained parameters, but it would seldom produce any difficulties—just get in line and drink from the fire hose of information coming down the pipe. Up-grading from a civvy-street Tweety Bird directly to a para-military-corporate Golden Eagle is another matter: having already moth-balled my 737 conditioning, I was amazed by how quickly I had fallen out of the loop. For months, all checklists had been in my head; now it was again necessary to call each checklist by its correct name before responding to each of its items in exactly the correct manner. Not only did I need to learn the most recent version of Canadian-speak, but immediately thereafter I was suddenly in Air Canada land and having to translate some English-to-English words as well as interpret a slightly different philosophy. For me, this inter-line transfer was far more difficult than expected.

If anything, the ensuing simulator-training segment highlighted my low and slow approach to the learning-curve machine. Logistical necessity had sent some of us trainees off to Minneapolis MN to get our B767 hands-on training courtesy of then Northwest Airlines. The fact that their state-of-the-art multi-axis simulators with day and night visual capability were for *B757* airplanes was considered incidental and of no particular concern: other than slight design differences in some onboard mechanical systems, the similarly aged wide-body and narrow-body airplanes looked remarkably similar inside the cockpit where identical instrumentation and flight management computers allowed for compatible-standard operations through all flight regimes … with slight allowances for hydraulic system vagaries and engine types. Guided by one of our old airline's typical first-rate instructors, the typically dense training syllabus was completed in typically rapid fashion. While busy shrugging off T-33 habits and B737 memories, I was somewhat heartened by the fact that my keen and capable F/O-partner sometimes also got tripped-up by B757 and B767 differences. Similarly, even with his conditioning as a non-stop company man—without an official leave-of-absence excuse—he also wrestled with recently revised checklists that had been slightly altered in name, text, and procedure. As with the simulator itself, none of these differences were calamitous; however, it seems there was a sufficient number of slight differences to inject an element of insecurity into our operational mystique.

Having flown together many times on other aircraft, Steve and I shared mutual respect while enjoying each other's company and capabilities. Though coming from different directions, we both expected this course to be a fairly typical "no-sweat" operation. It wasn't. While far from sweating bullets over competency, we had become frustrated with our awkwardness. We had lost our accustomed swagger and we were pissed. Back at home-base in YVR, one session in a real *B767* simulator, intended to bring us up to speed for our check ride, didn't succeed. Despite everyone's focus and best attentions, Steve and I remained so unhappy with our competency level that we took our concerns to the Chief Pilot Training. Understandably happy to hear our concerns, he responded in understandable fashion: "Thanks guys, you two won't have any problem."

He was wrong: we failed the simulator check-ride in convincing fashion. Amidst a generally shaky performance, the Captain (me) attempted a very slight modification to a theretofore standard procedure, thereby placing the First Officer in the dreaded and unenviable position of either countermanding his superior or disobeying his company's orders. It wasn't pretty … as if such things ever could be. Amidst mutual shock and awe came personal ponderings on the subject of advancing age: maybe the time has come; maybe …. Blessedly, the post-failure fall-out and self-imposed misery soon vanished into a refresher session followed by a successful re-ride; and with slightly less than normal swagger, we were back on the line. Thank you First Officer Toporowski.

In accordance with the new-normal, my first flight as Captain B767 carried hundreds of paying customers to Beijing, a place where I had never been … in an airplane I had never before flown. Fittingly, the supervisory check pilot on board was Captain Fraser Hodge whose professionalism had graded my initial simulator ride as a failure. With his guidance and with the able assistance of an experienced first officer, I became re-acquainted with the realities of long-range navigation while gaining appreciation for the necessarily well-defined diversion points demanded by a two-engine operation. Along with the old HF (High Frequency) radios came the newest IRS (Inertial Reference System) navigation computers. Three autopilots conducting an auto-land and maintaining runway centerline while auto-brakes are self-applied signified arrival of a new era.

By year 2000, I was checked out and line qualified on the B767, another mighty fine airplane by Mr. Boeing. The original 200-series airplanes had taken to the air in the early 1980s, followed closely by the stretched 300-series, and later by the 300ER Extended Range series which became our favourite. At 180 feet by 156 feet, it was slightly longer and broader than the DC-10 as well as significantly lighter at 412,000 pounds all-up. Its two CF6-80C2 high-bypass turbofans, rated at 62,000 pounds of thrust each, could push it almost as far and as fast as three engines pushed the heavier DC-10. As expected, with 24,000 US gallons (168,000 pounds) of fuel, the B767ER could take hundreds of people thousands of miles. With a third *cruise-relief* pilot aboard and crew-rest bunks as part of the package, the two-pilot airplane was pleasantly comfortable. The cockpit itself was a state-of-the-art collection of acronyms identifying the latest advancements in electronic presentation of flight attitudes and navigational realms. In fact, this was Mr. Boeing's first two-engine, wide-body transport as well as his first two-pilot airplane with a glass cockpit. It was my personal first and only experience with a two-engine, wide-body airplane as well as my first and only experience with a glass cockpit of any kind. Once we old dinosaurs became better acquainted with it, the '67 was a great pleasure to fly. If the 737 was a Jeep and the 727 was a Jaguar, the 767 was a Lincoln limousine.

My first flights to Beijing (PEK) were interesting: not only was it a drastic change to be flying long-haul international flights over *land*, but it was also enlightening to be passing our position reports to Siberian radio operators as if flying a 1960's extension of the Northwest Staging Route beyond Fort Nelson and Watson Lake. Of course, the advent of SATNAV and SATCOM (satellite enabled navigation and communication) soon changed all that. Meanwhile, at Hotel Kempinski in Beijing, funky old bicycles could be rented for $5 per day; whereas in Shanghai (PVG), language difficulties demanded an outright bicycle purchase for 500 Yuan on each occasion—at the end of the day, the bike shop owner would buy it back for 300 Yuan. While exploring remote corners of both these cities on wheels or by foot, getting lost was part of the plan, and it usually worked. In Japan, day-long hikes to unknown destinations were common activities; subway rides back to town in an unknown language provided the excitement in Osaka (KIX) and Nagoya (NGO). Similarly, frequent visits to Honolulu (HNL) and Sydney (SYD) usually featured extensive ramblings on rented bicycles. Elsewhere, London-Heathrow (LHR), Rome (FCO), and Milan (MXP) offered more citified explorations usually culminating in fine dining and theatre. Once, and only once, while on the way to London, a flashing RED telephone in my Toronto hotel room initiated an unexpected diversion: it seems a scheduling irregularity—probably arising from some previous unexpected diversion—was resolved by removing me from one pairing and reassigning me to another. Two more trips through the ITCZ (Inter-Tropical Convergence Zone) provided a multi-day layover in Sao Paulo (GRU) that included a one-day shuttle to Buenos Aires (EZE), my first-ever visits to both. Happily, all other Toronto-based crew members were well-familiar with the route and its operational idiosyncrasies.

So it went for about three more years until an excess of extra-curricular activities encouraged my slightly early retirement from Air Canada in August of 2003. While occasional administrative events may have been entered on my conduct card, I am unabashedly thrilled that my forty-year aviation career has ended without any aircraft accidents or incidents on the books. Yes, it's often better to be lucky than good … as seen by the following anonymous Captain's Report on the subject of FTAS.

…

There we were, Dumb and Happy, two experienced aviators in the pointy end of our state of the art jetliner, gently cruising downwind on an all too familiar route. The captain's steak was as good as these things can get and the government-approved coffee had a tasty kick to it. Fresh from annual vacation, the First Officer was soon into the books, feeling the need to re-familiarize himself with our relatively new corporate identity. Following up on our aircraft's two deferred maintenance defects, he set out on a steep trail of investigation that took him through the 'new' journey and maintenance logs, through the 'new' MEL and AOM, to the 'new' FOM and the 'still-new-to-us' way of cataloguing and distributing bulletins and other information of immediate concern. With benefit of the most recent in a series of briefing sheets, we even managed to communicate with MOC by means of a never before seen ACARS unit. The Captain, who had also recently returned from vacation and who was facing an impending simulator check ride, began intense study of the 'all new', 'real new' company SOPs that had become effective during their absence. An informative and constructive dialogue was inevitable. Lightly seasoned with traditional strong exclamation regarding current wisdom of the adults, the cockpit environment was otherwise relaxed and professional. The CRM teachers would have been charmed. The boss would have been proud.

Then came realization that our aircraft was no longer flying the flight-planned route. We were off track … far off track … farther off track than either of us had ever been … so far off track, in fact, that we're not telling. Then came the sick feeling in the pit of the stomach. How could this have happened? Easy, Stupid: about the time of last coffee delivery to our paper-filled cockpit, the Pilot Flying had 'temporarily' selected a Heading Mode on the FMCP in order to correct a slight deficiency in aircraft trim. Then, in the middle of our distraction while outside of AutoNav Mode, came a bend in our routing that coincided with a non-compulsory reporting point. Fortunately, we were almost the only bird in the sky that night and our sector controller had a healthy sense of humour.

While impatiently waiting … and waiting … to regain track, we had ample opportunity to reflect on the implications of our experience. On the way to the simple truth of a lesson well-learned came the reminder that piloting and paperwork are a poor mix. Also came the simple (but no less forgiving) observation that pilots are poor monitors of machinery—this probably would not have happened in a first-generation jet transport that requires constant steering; however, if not carefully watched, these latest marvels of the new age can soon lead you astray—faster than a piston-powered ADF in a thunderstorm. Yes, yes, cross checking of flight instruments and FMAs is also important during cruise as well as during those more critical phases of flight!

The irony of being 'caught by our keen', especially by the study of company Standard Operating Procedures, was not lost on us. Nor did our many combined decades of past navigational feats mean very much anymore; you are only as good as your last flight. Is this the mistake we had spent so much time practicing for? After sharing a brief, hearty laugh at ourselves, we joined in solemn oath to prevent this from ever happening on one of our aircraft again. We hope it doesn't happen to you. **F**ly **T**he **A**irplane, **S**tupid.

…

Footnotes and Postscripts

1. In 2007, chance encounter at a dinner party with non-airline friends near Toronto introduced me to the pilot, also now retired, who had filled my vacated slot on the Air Canada pilot intake way back in 1969/70. Over a pint of Hangar Flying, we determined he had passed me by about 200 numbers on the merged seniority list.

2. Too soon old and too late schmart: Having failed to maintain my written log book and having failed to relocate my computer printouts, I can only estimate my total flying time to be in the 20,000-hour range based on annual averages. Aircraft flown include: J-3 Piper Cub, PA-18 Super Cub, PA-22 Colt, Tri-Pacer, PA-23 Apache, Aztec, PA-30/39 Twin Comanche, PA-31 Navajo, PA-34 Seneca; Cessna 140, Cessna 172, Cessna 180, DHC-2 Beaver, DHC-1 Chipmunk, CT-6 Harvard, CT-133 Silver Star, C-45 Expeditor, P2V7 Neptune, CP-107 Argus; B-17 Flying Fortress; DC-3, DC-8, DC-10; B727, B737, B767. (B747 & B757 are simulator qualified) (the Tiger Moth, the Cessna 195, and two unidentified sailplanes are honourable mentions).

27

"Retirement"

My retirement from the airline, by then Air Canada, was neither here nor there in terms of life-style achievements. Cashing in my chips almost a year before the compulsory retirement age of sixty removed any sense of having made it, as in breaking the finish-line tape; instead, it was more a case of moving on, a restlessness: other interests were calling, and my heart was no longer in it. Having opted out of the company pension plan many years before, there remained little incentive for doing yet another long flight to Beijing … except of course, the money that I would continue to spend unwisely. The brevity of human existence had finally penetrated my brain. So too had my lengthy list of unexplored territories. Given the time available and a fading ability to multi-task, it was time for me to move along. Yes, I miss it. There is great freedom in flying like a bird, far above daily distractions and earthly turmoil; so too was pleasure found in the business of flying … the teamwork in making it happen, bringing together disparate elements into one fine hum, slow-dancing through rush-hour chatter and breaking-out-on-top into the morning sun, skimming layers of stratus, vaulting over cumulus towers, and diving deep canyons before the day is done.

While transitioning away from my aviation career in 2003, the long-enduring dream of making a Stikine River film motivated reconnection with Bill Stewart in production of a documentary film by which I became a researcher and writer as well as an actor, photographer, and producer. Unfortunately, our film *Pete: Moving Man Made Mountains* was not as successful as it might have been, and we found ourselves well spent without a source of income. In the process, however, the film's subject hero, Pete Friesen, invited me to organize his collection of technical reports into a written biography. The idea of writing a book of any kind about anyone or anything had never been seriously considered; if for no other reason, there was too much else going on. So much for that concept: having a wonderful friendship with Pete Friesen and no river film in production, I agreed to the project and set to work with his offer of financial compensation.

Though writing per se has never been front and centre, it has always had some part in my life: the GDCI high-school news column for the Goderich Signal-Star newspaper was my first publishing gig back in 1962; much later came fifteen years of reporting for *The Current*, the newsletter for the *friends of the Stikine* conservation group. Closely aligned are numerous eco-essays on that subject as well as a large file of poetry, river related and otherwise. For some people, it seems writing can be as addictive as flying … especially if aging leg joints, despite bionic replacement, have put a damper on skiing and paddling. There is no complaint … only reverence for my far-less-fortunate predecessors whose only solace for immobility after decades of working in the field was a rocking chair and whose only escape from pain was a bottle of whiskey. After decades on the move (out there in the field), I found myself doing exactly what had steered me away from the writing profession in the first place: sitting up all night at the keyboard surrounded by reference material in its various forms. Perhaps advancing age had uncovered an element of fun in an otherwise perceived tedious pursuit. All in all, it was a satisfying experience. Having begun at ground level with few tools, it was rewarding to see our project grow to fruition as a completed entity. Involved throughout, Pete was able to approve the book's concluding chapter prior to his passing; and happily, his family and industry colleagues all regard our finished product as worthy testament to the man and his many accomplishments. *Man on the Move: the Pete Friesen Story* was self-published in 2009.

While researching the subject matter for Pete's book—the method for relocating manmade structures large and small—I became fascinated by historical background and by the structural-moving industry itself; as well as learning much about the process and about one of its foremost leaders, I learned some things about myself. Until recently, hindsight has not been much on my agenda … why be concerned about yesterday when tomorrow is almost here … yesterday's energy is spent and new challenges lay ahead. Sometimes, it seems we can ride good luck to the far reaches of dignity without ever having to look back or even cover our tracks. Of course, pushing the envelope with blind enthusiasm is easier done when blessed with ample good fortune and the support of very human beings. Such is the case with me; and I am grateful for the opportunities and friendships offered. Along with my acceptance of self-induced failures, comes the need to reconcile extreme impulses as unavoidable human realities; otherwise, we're left with the maybe-shoulda-woulda-coulda regime of charter airlines not created, jet fighters not purchased, and the many other paths that might or might not have been taken. On the other hand, impulsive personal indiscretions in the people realm are not so easily forgiven, be they pig-headed misdeeds or the utterance of utterly stupid things at the worst possible times. Nobody said it would be easy; and, on life's report card, the black marks always seem to outnumber any gold stars of success. Being a disaster as a husband and a near-failure as a father does tend to bleed the colour from an adventurous life-style; and, although there is some comfort in having ample company in such failure, there is no easy redemption. Having learned to forgive the trespasses against me, I hope others can do likewise … keeping in mind that a clear conscience is sure sign of a foggy memory.

Some guys are just born lucky, and some of us get all the help we need … deserved or otherwise. A sister's chance meeting at a high-school reunion prompted an e-mail message that changed my life: former high-school sweetheart Susan (nee Sale) sent warm greetings while enquiring about my life. Good grief! I would be lying if I said she had never crossed my mind from time to time. After just beginning to know each other in 1962, we were immediately separated by my pursuit of airplanes and my conditioned need for vocational independence. Well before the age of e-mail and cell phones, we had remained connected for several years via hand-written letters and the too infrequent meetings allowed by university and air force schedules. The strain of each maintaining two realities had eventually taken its toll on friendship and flexibility. If I had it to do over again, I would marry her on the spot if she would have me. As young and naïve as we were, it would have been an interesting opportunity for growth together. Maybe … just maybe … her love would have opened my heart to a more wholesome state; more likely, however, given my track record, she would probably not be speaking with me today. Instead, I am happy to say, after forty years without contact, our conversation picked up as though never let go, and happy togetherness soon overwhelmed any past regrets. By honouring each other's past and respecting each other's personal journey, we are now trusting in our shared future …

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PER

Peter Rowlands autobiographical history of his aviation career is a true example of what many pilots encountered in their desire to climax their love of flight. Excellent word pictures ... technical detail ... pathos ... humour ... all a part of this intriguing story. Some pigs can indeed fly, and Peter is one of the lucky ones.

– John R. Scott, Editor, *Position Report*

While the old adage may be true that each of us has at least one good book in us, not everyone has water skied from Summerside, PEI, to Montreal, and/or operated an "airline" in the eastern Caribbean, to give that book some compelling talking points. Retired airline Captain, Peter Rowlands has done these things and more, so rest assured the stories in his book will keep you turning its pages. Not to mention ... Pete tells the stories with humour and verve. He's a good writer ... so what's not to like.

– Cliff Cassidy, Publisher, RAPCAN PX Magazine

Peter's ability to weave detailed recollections with often self-deprecating humour makes each chapter slide by all too quickly, whetting the reader's appetite for the episodes yet to come. It is a delightful read.

– Mark H. Goodrich, Aviator, Attorney, Author

More than a monologue about flying airplanes, *Some Pigs Can Fly* is a retrospective that spans forty years of military and commercial aviation with little-known facts about aircraft production history and long-forgotten details about its performance envelope while identifying some ancient technologies and describing how they worked ... or not.

- **For historians:** examination of long-gone machines such as the Link Trainer and seldom-seen procedures such as inflight operation of a fifteen-man Argus anti-submarine crew.
- **For geographers:** a winter of charter flying around the Caribbean and a summer of high altitude photography over northwestern Canada.
- **For plane watchers:** thirty-three years of commercial airline experience providing insight into parts of the operation and close-up inspections of several erstwhile modern jetliners along with in-your-face looks at several classic aerodromes.

PETER ROWLANDS is a part-time writer and would-be filmmaker living north of Toronto with his partner Susan. Written works include *Man on the Move: The Pete Friesen Story (2009).*

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