

CLEARED DIRECT DESTINATION
My Solo Flight Around the World for Cancer Awareness
(An Autobiography)

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© **Ravi K. Bansal, Ph.D.**

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ABOUT THE AUTHOR



Ravi K. Bansal, Ph.D.

Ravi K. Bansal, Ph.D., an amateur pilot, flew his single-engine plane solo around the world in 2017, becoming the first person of Indian origin to do so.

Ravi is the former Chairman, Chief Executive Officer, and Co-Founder of AirSep Corporation, one of the world's largest manufacturers of medical and industrial oxygen systems, with sales in over 100 countries, based in Buffalo, NY, USA.

He earned his Ph.D. in Mechanical Engineering from Georgia Institute of Technology in 1978. He was chosen Entrepreneur of the Year for the Upstate New York Region by INC. magazine in 1993. In 1998, Ravi was cited as a business leader by the Buffalo Council on World Affairs, for his contribution to the Western New York economy and exports.



Rotary Ambala Cancer & General Hospital

CLEARED DIRECT DESTINATION

My Solo Flight Around the World for Cancer Awareness

I began my solo flight around the world as if it had already been *Cleared Direct Destination*, for its figurative destination, to raise cancer awareness and support the Rotary Ambala Cancer & General Hospital in my hometown in India. Circumnavigating the earth solo in a single-engine plane, like climbing Mount Everest, is an ultimate test in courage and skill. Few people attempt, and even fewer complete it. More than four thousand have climbed Mount Everest, but only one hundred and twenty-three have flown around the world solo. No one of Indian origin had yet accomplished this feat. If successful, I would be the first. Preparations were intense; failure was not an option!

RAVI K. BANSAL, PH.D.

DEDICATION



Dr. Chatar Muni Bansal and Mrs. Ramo Devi Bansal

My parents were both simple people, with big hearts and no desires of their own except for love for their children and kindness for others. My mother, with only a fifth-grade education, always wondered if she did a good job raising her children. Mom, you were the best mom anyone could ever imagine. My father, a Family Practitioner, dedicated his whole life to ease the pain and suffering of the very poor population of the small town in remote foothills of the Himalayas to which he belonged. I will always love them and cherish their memories!

FOREWORD

by

Satish K. Tripathi Ph.D. and Robert J. Miller, ATP, CFII



**Satish K. Tripathi, Ph.D.
President, University at Buffalo
State University of New York**

Dr. Ravi Bansal grew up in a small town in India and went on to grow the corporation he co-founded into a worldwide entity. He went from flying paper airplanes as a child to flying his single-engine plane solo around the world – the first native of India, and one of only a handful of individuals, to accomplish such a feat.

Clearly, Dr. Bansal – an accomplished engineer and private pilot who has lived in the U.S.A. for five decades – has a story to tell. In “Cleared Direct Destination,” he does so in a compelling fashion, juxtaposing the highs and lows of his life’s journey with those of his around-the-world trek.

Whether navigating the corporate world or an airplane, Dr. Bansal recounts how he used methodical planning and close attention to detail to succeed in both endeavors. His down-to-earth storytelling style creates an inviting read in which he is forthcoming about his struggles and factual about his mishaps. I found his narrative about traveling from India first to Arizona State University and then to Georgia Tech for graduate studies truly inspiring. Through hard work, confidence, and determination, Dr. Bansal found his path in business. From there, he tapped these very same qualities to circumnavigate the globe.

This book flows easily and leaves readers interested to learn more. Blending his life's journey with his time in the cockpit, Dr. Bansal reveals the close interplay between the two. The conversations between Dr. Bansal and his logistics support team, both on the ground and while airborne during flights around the world, offers readers perspectives that they have likely never considered before.

Congratulations, Dr. Bansal, on a great read. I salute your inspirational journey!

Satish K. Tripathi, Ph.D.



**Robert. J. Miller,
Airline Transport Pilot (ATP),
Certified Flight Instructor
Instrument (CFII)**

This book is a gripping story of a sixty-eight-year-old amateur pilot, a high-performance single-engine airplane, and a dream to fly around the world for a compelling humanitarian cause. It is a must-read for every aviation enthusiast, as well as people looking for ways to serve humanity.

It all began when Ravi Bansal, a private pilot from Western New York, learned of the tragic passing of his beloved sister-in-law in the town of Ambala, India. She was struck down by breast cancer far too early in life due, in part, to the absence of even the most basic diagnostic medical equipment. Ravi took on the challenge of raising enough money to purchase an MRI unit for the hospital that treated his sister-in-law. He did it by finding hundreds of people willing to underwrite a challenging, fundraising, around-the-world flight in his single-engine, propeller-driven airplane.

Come along with Ravi as he researches the myriad of rules and regulations of the over 20 countries where he would touch down for food, fuel, and rest. Add to this, the logistics of advance shipping over barrels of aviation fuel to countries along the route of his flight. Then sit with Ravi as he maps out a course that would take him over four of the world's five oceans. Lastly, of course, experience the training and survival equipment he would need, should the unthinkable happen.

Then, there would be the celebration Ravi would receive as the first solo “Earth rounder” of Indian origin, who not only flew around the world in a single-engine airplane but who raised enough dollars to provide a small hospital in India with the equipment that will save countless lives in the future.

Robert J. Miller, ATP, CFII

PREFACE

Circumnavigating the earth solo in a single-engine plane is like climbing Mount Everest or going into space, the ultimate test in courage and skill. With a minimal chance of survival in case of a mishap, all are inherently risky. Few people attempt, and even fewer complete them. Even so, more than four thousand have climbed Mount Everest, and more than five hundred have gone into space, but only one hundred and twenty-three have flown around the world solo. I completed this feat at the age of sixty-eight, becoming the first person of Indian Origin to do so.

This book tells the story of my quest to learn to fly and of my round-the-world solo flight to raise cancer awareness and to collect funds for the Rotary Ambala Cancer and General Hospital in India. The flight took place from July 4, 2017, through August 20, 2017. It met all its goals. Just as I used my passion for flying as a medium to serve, hopefully, this story will inspire others to use their passions or vocations as mediums to serve.

For pilots wanting to undertake such round-the-world flights, this book describes in detail how to plan, prepare, and execute such flights.

Furthermore, in continuation of the campaign for the Rotary Ambala Cancer and General Hospital, all proceeds from the sale of this book will go toward funding the development and further growth of the hospital.

ACKNOWLEDGEMENTS

I thank and acknowledge my immediate family for helping me to conceive and then encouraging me to complete this journey. It was a team effort. My wife Pratibha, my sons Rohan and Nitin, and my brother Subhash were at the front and center of this endeavor. My other siblings Manju, Brij, and Rajan, their spouses and kids, my nephew Aashwin, and his wife Shipra all supported my mission with a full heart and helped in whatever way I asked.

There are others, including some I had not even met before starting on this journey but who, in various ways, provided invaluable help during my Round the World flight, Luidmila Agapitova, Evgeniy Leontyev, Drs. Mubeen and Qutub Syed, Giuseppe Berrardo, Sulaiman Al Mufargi, my nephew Rajneesh Bansal, his wife Neeru Bansal, Wing Commander Rahul Monga, Sanjay Choudhary, Dr. Pasupati Thanikachalam, Peter Chiaravanont, Suwatchai Phongbunjert, Anand Samual and Sam Wong.

Finally, I thank the two who spent many hours reading and editing this book, Erin Almond and my dear sister-in-law Karen Jain, Ph.D.

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INTRODUCTION

July 25, 2017

Flying alone at 17,000 feet above the Mediterranean Sea in my single-engine Columbia 400, disaster struck. I'd begun my solo round-the-world flight by taking off from Buffalo, New York three weeks earlier, and had not had any major safety issues in all that time. But now, my engine began to run roughly, jerking and sounding as if it was on the verge of quitting. Not only that, with my Garmin GPS not functioning properly, I was losing my situational awareness. Unnerved, I took a deep breath; this wasn't a time to panic. My anesthesiologist wife, Pratibha, likes to say that pilots and anesthesiologists have this in common: 99% of the time our jobs are routine or even boring, and 1% of the time it is sheer panic which involves dealing with a real life-or-death emergency. It appeared that my 1% time to panic had come.

Since I'd worked as an engineer for most of my life, I knew that, when something goes wrong, the best way to fix it is to go down the list of possible culprits until the source of the problem is found. Noticing that the fuel flow was fluctuating severely, I thought maybe the fuel pump had failed. I turned the backup pump on, but it didn't make any difference. The engine still bucked like an angry horse.

Earlier that day, I had waited for more than half an hour with my engine running, under the blazing sun on a 100-degree day, for

my turn to take off from the Crete International Airport. By then, the temperature in the cockpit had soared past 125 degrees. The climb to my assigned altitude was all through very hot air, and the cockpit had not had time to cool down yet. This was the hottest weather I'd experienced so far on my trip, and I still hadn't crossed the equator. One of the differences between flying in a commercial jet versus a personal plane is that temperature control is much less sophisticated. It hadn't bothered me while flying up through Canada, and further north into Greenland and Iceland, but now I was headed towards the Arabian Desert. I could feel the sweat pouring down my back and pooling behind my knees. I knew it wasn't only my nerves, -- I was still just at the edge of panic -- it was the sun, blazing impassively above and making the waves far below me glitter like diamonds.

Not that I was admiring the scenery just then. I had to keep going down my checklist. I set the mixture control to full rich, hoping that it might somehow stop the fluctuation or get the air/fuel ratio rich enough to make the engine run smoother. When even that didn't make a difference, my heart sank. I was running out of options.

I increased the propeller RPM to the maximum and pushed the throttle in for full power, but the engine continued to buck. Truly panicky now, I started to feel dizzy. With each passing minute, the engine seemed to get worse. I worried it would quit on me altogether. I considered radioing Air Traffic Control at the Crete International Airport, but I was far enough away now that I knew I couldn't glide there if I lost engine power altogether.

"Stay calm, Ravi," I said to myself, but my panic was already starting to fade, and I began to feel sleepy. Was this all just a dream? So much of my life seemed incredible to me that sometimes I half-expected to wake up and find myself – not in the comfortable home outside Buffalo where Pratibha and I had lived for the past 38 years – but in Kasauli, the small town in the Himalayas where I'd grown up—a place where dirt roads crisscrossed the steep hills and where most people traveled on foot, if they traveled at all.

How did I get from there to where I was now, flying high above the Mediterranean in my single-engine plane? Mine was a story that

involved both angels and devils – not spiritual beings, but people who came into my life at just the right time to either help or to hinder me – as well as a good bit of gumption, and an unflagging sense of adventure. That was something Pratibha and I had in common: an eagerness to explore, and a daring that sometimes made our families worry, but which had allowed us to make a life together that spanned the globe.

Was this where it all ended? After having come so far, was I going to fail in my attempt to fly solo around the world? Was my quest to raise money for cancer prevention and treatment at the Rotary Ambala Cancer and General Hospital going to be all for nothing? The warmth of the cockpit was almost soothing, and even though the engine continued to shake and sputter, I was tempted to close my eyes and think back to where it all began.

1

TERRIBLE NEWS

In the early morning of March 15, 2012, the phone rang at my house in Buffalo, New York. It was my brother, Subhash, calling from India to let me know that Sneh, my dear sister-in-law, had just succumbed to breast cancer. Though she had been sick for several years, the news of her passing was still shocking. She was only 64. As kind and compassionate as ever, even while taking her last breath, she put others first. Her last wish was that, instead of having her family perform cremation rituals to help her soul get to heaven, she wanted her body donated to a hospital anatomy department for research to help find a cure for future generations. She left a lasting impression on all who knew her and inspired many who carry a banner in her name to make a difference and to serve humanity.

Though she was only a year older than me, she was the one I could always lean on while growing up. The saddest thing for me was that she was so young and still so full of life when she passed. Why did she have to die in the prime of her life? Could her family have done something more to help her? Was there something we had missed?

In hindsight, yes, we did miss recognizing the symptoms of her cancer. She had been feeling small lumps and slight pain in her breasts for two years. We ignored them; she ignored them. If we

had known even a little bit about cancer awareness, we would have urged her to see a doctor. We did not. By the time a specialist examined her had detected her cancer, it was too late. The cancer had already progressed to stage two, and the chances of her survival had dropped to 50%.

I was devastated by the loss of my beloved sister-in-law, but I also understood that I couldn't change the past. I wanted to do something to honor her, but what? I wanted to do something in her name that would make a lasting difference.

I wondered if I could bring cancer awareness to rural India in her honor, to help lessen the likelihood of such a tragedy happening to other families in the same circumstances. Bringing awareness of cancer prevention and treatment to the masses would involve teaching people about the common symptoms of cancer, as well as how to do simple, regular self-exams. This way, symptoms could be examined by a specialist much earlier, potentially saving many lives. No one's cancer should ever be detected late, no matter where he or she lives. How could I do this? Trying to raise awareness by educating small groups one at a time was not efficient.

I needed a mass communication platform; a means to draw widespread media attention to my cause. I wondered if I could do something crazy such as fly around the world solo, creating a story of interest for the press to cover. I was just a hobby pilot, however. I wasn't even sure I was skilled enough. Of course, that made it an even more challenging adventure, and the more challenging the adventure, the more the press would be likely to cover it. Flying solo around the world in a single-engine plane is to pilots what climbing Mount Everest is for mountaineers or going into space is for astronauts. All these attempts carry enormous risks, as there is little chance of survival in case of any mishap. If bad weather or an engine problem occurs with a plane while flying over land, one can usually land safely on a road or field. However, for flights around the world, 70 percent of the time, you are flying over remote waters. Four thousand people have climbed Mt. Everest, five hundred have gone into space, but only one hundred and twenty-three people have flown solo around the world. No person of Indian origin had ever done so.

I recognized that a solo round-the-world (RTW) flight by me would be record-setting and that taking on an adventure for a cause was a win-win. If the adventure succeeded, the cause benefited; if the adventure ended in tragedy, the cause could still benefit from sympathetic media coverage. The primary goal for the flight would be to utilize all the media coverage received to raise cancer awareness and money for the immediate purchase of a much needed MRI machine for Rotary Ambala Cancer and General Hospital. I also hoped through this flight to create a donor base worldwide for ongoing contributions to the hospital's endowment.

I decided to embark upon an adventure that I had been inadvertently preparing for since childhood: a solo flight around the world.



Kasauli, the small town in the Himalayas where I grew up, was originally established by the British Raj in 1842 as a colonial hill station in North India. With a population of 5,000, it was home to gabled colonial-era houses, orchards, and the green-roofed Christ Church, dating from the mid-19th century. At the southern edge of town, Monkey Point (elevation 7000 ft.) overlooks forests of horse chestnut, pine, and Himalayan oak. Wild berries, flowers, apricot and fig trees filled the mountainsides. Nearby, the Gilbert Nature Trail wound through a lush countryside rich in greenery and birdlife.

Only the army officers and a few Britishers from pre-independence days lived along the paved upper mall road and lower mall roads there. The only other paved thoroughway was a steep cobblestone road that traversed the lower part of the town where most people lived. The rest of the thoroughfares were pebbly trails. In the 1950s, only army vehicles were allowed on the upper and lower mall roads. For a civilian in Kasauli, the only way to travel at that time was on foot or by mule. It was there, however, that I first dreamed of becoming a pilot.

My grandfather moved to Kasauli in 1920 to start a hardware store. It was the only hardware store during the early years of the town and remained so until the year 2000, when my uncle, who had taken over from my grandfather, retired. The town is seven miles off of the national highway and has a very limited water supply. This is one reason why the population has never grown beyond 5,000. My grandfather had five sons and three daughters. The daughters moved away after they married, but the sons all stayed in town. They, in turn, had thirty-seven children. So, in a town with less than 5,000, the Bansal clan, with over fifty members, had a significant presence!

The excellent views, along with the cool climate, made for quite a bit of tourist activity during the summer, but the winter months were very cold, with occasional snow. Life was hard, then, as most houses were stone, with no insulation or heating. We children passed the time playing soccer at the parade ground, running around the mountain trails looking for wild berries, or climbing trees searching for apricots and figs. Other times, we'd sled down the cobblestone road on wooden boards. The cobblestone road remained empty all day except in the mornings and evenings when people walked to and from work. In between those times, the road became our playground – we played marbles, tag with old tennis balls, or cricket with makeshift bats and wickets.

A tuberculosis sanatorium and Central Research Institute (CRI) for making rabies vaccines had been established by the British in Kasauli before Independence. CRI was the largest source of employment in the town. Most people lived about a mile and a half down the cobblestone road from CRI on the top of the ridge. Our house was a two-story structure midway between the town and CRI. We lived upstairs, and my father had his clinic downstairs.

Every morning, my father would go downstairs to his clinic. When he wasn't tending to patients, he would sit on a chair in the sun outside and read the newspaper. Townspeople walking by on their way to work would greet him and often stop to chat. By mid-morning, most people had already walked by, either to work or to open their shops in the market. The town barber, a gregarious, chatty guy, would then make his rounds to shave or give haircuts

to all the shop owners in need of such services. There was always a card or chess game going on in front of someone's shop alongside that cobblestone road. The games were for fun, with no betting. Anybody walking by could stand there to watch or join the game.



My house on the cobblestone road, Kasauli, India

My father had graduated from Government Medical College, Amritsar, in 1945. With the severe shortage of doctors in India at that time, most of his classmates had chosen to either join the Indian Armed Forces as officers, to enjoy the prestige and luxurious lifestyles of highly ranked officials, or to move to big cities to establish thriving medical practices. Instead, my father elected to return to his impoverished hometown. Before returning, there had never been a qualified physician in Kasauli to serve the medical needs of its civilian population. As the only physician in Kasauli, my father worked extremely hard, often walking for miles through the unpaved hilly terrain, making house calls for the poor and sick for little money. He lived a Spartan life. He wore simple clothes, never drank alcohol, ate strict vegetarian food, did not take vacations, throw or attend parties, or do anything wasteful for fun. He worked seven days a week and was on call 24/7. Despite working so hard to earn a living, he spared no expense when it came to educating his children.

I attended Government High School, a public school in Kasauli. It was about one and a half miles away from my house. Every morning, I walked down the hilly, dirt trail that led to the school. It was located on a ridge and consisted of three buildings: one main

building at the upper level, a smaller building at the lower level, and a science lab room all by itself a few yards down. All three were rundown, old buildings. Government High School was co-ed, but, in those days, boys and girls had separate classrooms. Since there were many more boys than girls at the school, the main upper building was used for boys, and the smaller lower level building was for girls. The school had no furniture, so all of us sat on the bare floors for our classes.

I remember one particular science lab when I was thirteen years old. The teacher explained that we were going to do simple experiments that demonstrated the basic properties of light. The experiments would show that for plane mirrors – mirrors with a flat, reflective surface – the angle of the incidence of light was equal to the angle of reflection of the light. We were all given a small strip of a plane mirror along with four pins. The teacher asked us to place two pins in front of the mirror, look at their image in the mirror, and then place the other two pins in front so that they lined up in a straight line with the images of the first two. He patiently described in detail how we were to do this. Finally, after demonstrating for us with his plane mirror, he asked us to do the experiment ourselves.

All the students were able to complete the task easily, except for me. When the instructor saw that my pins did not line up straight, something that he had worked so hard to explain, he got very upset. “Why can’t you do such a simple experiment, Ravi?” he shouted. “Maybe it has something to do with your bad genes-- you know none of the children from the Bansal family have ever done well in my science classes!” He told me to sit outside the classroom for the rest of the hour as punishment.

Feeling hurt and embarrassed, I walked out of the classroom while the other students laughed. Little did the teacher know that the reason my pins did not line up was because I was so nearsighted that I could not see the image of the pins in the mirror – something I, myself, would figure out only years later. While waiting for the class to end, I entertained myself by making paper airplanes with the pages of my notebook and throwing them down into the valley. Because we were so high up on the ridge, these paper airplanes sometimes caught updrafts and flew for five to ten minutes before

crashing in the valley below. I was always thrilled to see these long flights.

Even though I suspected my eyesight was to blame for my inability to complete certain tasks, children wearing glasses were stigmatized and teased at the Government High School, so I never told anyone about my sight issues. Over time, however, the inability to clearly see what teachers wrote or illustrated on the blackboard caused me to become increasingly inattentive in class. Soon, the only thing that interested me was making paper airplanes and throwing them down in the valley. I did that as often as I could and daydreamed about flying a real plane someday.

2

A BELOVED SISTER-IN-LAW

My older brother, Subhash, and sister, Manju, moved from Kasauli to Ambala in 1961 and 1963 to study. They stayed with my maternal grandparents. Ambala, 60 miles from Kasauli, was my mother's hometown and the location of an important Indian Air Force Base. My maternal grandfather had been sick for a while, and, during that time, his family business had faltered. Unfortunately, he succumbed to prostate cancer in 1962. The family remaining in Ambala thus consisted of my great-grandmother, my grandmother, and my two older siblings. By 1964, the family was sustaining itself solely on meager rental income from ancestral property. Both my grandmother and great-grandmother were homemakers who had never gone to school or learned to read, but they did the best they could to take care of my siblings while they attended school.

Finally, the family's dwindling finances made it imperative that Subhash quit school and begin working, although he had only finished 12th grade by then. Since his job options were limited, he decided to start his own brick-making business. Once he had a way to support himself and the family, the next most urgent piece of business – at least according to my grandmothers – was for him to get married.



Mrs. Sneh Bansal (1948-2012)

Sneh joined the household in Ambala in 1968 in an arranged marriage. Truly loving (“love” is the literal meaning of her name) Sneh was beautiful, cordial, and jovial. My brother was 22, and she was only 20 when they got married. After their wedding ceremonies, they became the heads of their household. Right from the start, Sneh took her responsibility for taking care of the family very seriously and, despite minimal financial resources, ran the household effectively. She worked hard to strengthen the bonds of love and affection between our family members, and she treated everyone in the family with great affection.



After completing 10th grade, the highest level of school available in Kasauli, I joined the family in Ambala in 1964 to continue my education. There I enrolled in the historic Sanatan Dharma College, established in 1916, before India’s independence. At 4’ 11” and weighing only 95 lbs, I was the smallest student in my new school. Bullied by boys and ignored by girls, I often skipped classes to ride my bicycle to the nearby Air Force Base to gaze at the planes. The Ambala Air Force Base, being very close to the border with Pakistan, is one of the most secure bases in India. In April 1965, India and Pakistan went to war over Kashmir in a skirmish that lasted until September 1965. The Ambala Air Force Base was the first line of Indian defense during this time and was raided often by the Pakistan Air Force.

During one air raid in September 1965, after we'd been watching the tracer fires off and on all night from our windows, we heard the loud bangs of the bombs. Through word of mouth, we found out that the bombs intended for the base had landed on a Military Hospital and the St. Paul Cathedral, one of the oldest churches in India, adjacent to the base. I lived less than three miles away.

After hearing the air raid clearance siren, I rode my bike there at dawn and was among the first to arrive at the bombed site. The church rubble still smoldered, and smoke blew in our faces. We also could see and hear many India Air Force fighter planes taking off and landing in response to this raid. The memory stuck in my mind, and even to this day, I feel awestruck by the Ambala Air Force Base.

Though I could never get closer than half a mile from the fenced-in periphery of the base, I sometimes caught glimpses of planes taxiing for takeoff. That alone made it worth skipping classes. As a consequence of missing too many, I failed my first year of school in Ambala.

In the Indian school system, it was important to do well in the 11th grade (pre-university). The grades that students earned that year were used by professional schools to determine who they would accept for further studies. The pre-university exams we took that year were similar to the American SAT exams; they were standardized tests conducted by state universities. In my case, this was Punjab University, located at Chandigarh, the capital city of Punjab state. Both Ambala and Kasauli were in Punjab and Chandigarh was about midway between them. Because there wasn't any computerization in those days, all pre-university students sat for these exams at their respective schools at the same time. After the three hour allotted time had passed, the answer sheets were collected and sent to Chandigarh for grading. Manual grading took 6-8 weeks for those tens of thousands of papers. The results were then published, unannounced, in the daily newspaper.

After taking my exams in Ambala, I returned home to Kasauli for the summer. In those days, Kasauli and the surrounding hilly areas were classified as remote and backward by the Indian government.

There was no reason for new people to move in, and those who grew up there tended to stay. Most of the young people in my hometown were not ambitious, with good reason. Ultimately, they knew that irrespective of how they fared in school, they would end up working in their family businesses.

Us kids used to tease each other by giving each other nicknames based on physical appearance or our father's professions (e.g., Fatso for a chubby kid, Baldy for a kid with thinning hair, Contractor for the contractor's son). My nickname was Doctor because I was the doctor's son. One of my friends was a jovial and fun-loving boy named Sunil, but, being big-headed, we use to call him Makkha, which means Big Headed Fly in Hindi.

After finishing 10th grade, Sunil had also moved to Ambala and enrolled in Sanatan Dharma College. After taking the pre-university tests, he also returned to Kasauli for the summer break, and, after six weeks, we began to check for our results in the daily newspaper at the town library.

On the day the results were finally posted, my father went downstairs to his clinic after breakfast, as he'd done every day for as long as I could remember. Most of the town people had walked by already, and the barber was shaving my father when I saw Sunil walking down the cobblestone road. I leaned out of the window and yelled, "Hey Makkha, are the results in and did I pass?"

Sunil, not noticing that my father was at the clinic and could be listening, called up to me, "What the hell did you expect? I got swatted like a fly, and you got swatted too!" He giggled and ran on down the road.

It was easy for Sunil to laugh – failing the test for him meant that his school days were over, and he could now join his father's business of building retaining walls around town. But I was immediately afraid of how my father would react.

My father said nothing in that moment, but, after the barber left, he came upstairs and angrily told my mother that he did not believe I would ever amount to anything. It was heartbreaking for him to see me not do well in school. My father told me that he only

ever saw me worrying about how my clothes looked and goofing around but never studying. And then, for the rest of the summer, he stopped talking to me altogether. I resolved to study harder the following year and to stop skipping classes.

The following year I returned to Kasauli for the summer once again and waited for my test results to be listed in the daily newspaper. I went to the library almost daily. Finally, the results were in, and I anxiously looked for my roll number amongst the thousands listed in the paper. When I couldn't find it, I checked again. Did I fail the test? I was sure I had done well, and couldn't imagine failing again. I asked my younger brother, Brij, and my cousin, Anil, both of whom happened to be with me, to check. They couldn't find my number either, but they noticed a footnote saying that results for certain groups of roll numbers were not available at the time of printing. My number happened to be one of these. There was no mention of whether those numbers would be printed at a later date or if we needed to get them on our own from the center or the university directly.

One of my older cousins worked for the university at Chandigarh. We thought maybe he could find my result, but we had no access to phones. The only way to find out for sure was to actually go to the university. The only bus we could take from Kasauli left late in the afternoon and would reach Chandigarh only after the university closed. An alternative was to walk to Kalka, a town 22 miles away by bus but only nine miles away if we climbed 3600 ft down the mountain on pebbly dirt trails. Kalka had frequent bus service to Chandigarh, and we could reach the university just before closing time.

Seeing how nervous I was about my results, Anil offered to walk down to Kalka with me. I asked Brij to tell our mom that we'd gone to Chandigarh to find out my result. Anil and I walked nine miles down the mountain trail to Kalka and then took a bus to Chandigarh. By the time we arrived at my older cousin's office at the university, it was almost closing time. Luckily for me, my cousin was able to find out my result: I had passed in the top fifteen percent of all students!

There was no bus service back to Kasauli that late, so we spent the night at our cousin's place and took the first bus back the following morning. It was still pretty early when we reached home. My mother was cooking breakfast, and my father was using the toilet. My mother heard us open the door and asked loudly from the kitchen about my result. I yelled that I had passed and was in the top 15%. My father overheard us and came running out of the toilet, holding up his briefs, clearly not having finished. He could hardly contain himself. Full of excitement and beaming with joy, he said, "See, I told you that if you paid even a little attention to your studies, you would do well!" He was getting chatty – perhaps he was relieved that he no longer had to give me the silent treatment – when he suddenly noticed our bemused expressions. He realized he was still holding his briefs up with one hand and stopped, mid-sentence, to go back to finish and shower.

Later that day, I realized that my father must have told everyone who stopped at his clinic about my test result, as everyone in town seemed to have found out about it before I could tell them. I passed both my pre-university and the next (pre-engineering) school years in the top 15% of my graduating class. In 1967, I gained admission to Moti Lal Nehru Regional Engineering College in Allahabad. Of course, my father was very pleased.

3

WISDOM FROM FAMILY MEMBERS

In 1997, after ignoring her vague symptoms for several years, my sister-in-law, Sneh, was diagnosed with breast cancer at 48 years of age. After her initial surgery at Ambala, she was referred to Ludhiana, a town 120 kilometers away, for chemotherapy and radiotherapy.

My brother and Sneh began going to Ludhiana regularly. Apart from the hassles of traveling, they often had to spend a full day waiting to meet doctors or to have tests done, without having food or a decent place to rest. They were surrounded by other patients, struggling with the same conditions, and some having traveled from much farther away.

As Sneh's condition progressed, Pratibha and I visited her as much as we could. During the last few years of her illness, there were many times when her physicians thought she would not survive another year. Each time she received this bad news, I traveled to India to visit her. I visited her in 2002, 2007, 2009 and 2011. Incredibly, she defied death over and over again and emerged like a victorious warrior, eager to resume taking care of her family. When asked how she was feeling, her answer was always "fine."

Finally, in 2011, she became extremely sick. Her body darkened from the radiotherapy, and her bones grew brittle as the cancer

had metastasized there. At that time, Ambala still did not have adequate facilities to take care of serious cancer patients. In comparison, Hisar, a town 200 kilometers away, where Sneh's daughter Richa lived, had a better treatment facility. Richa invited Sneh to Hisar to continue her treatment.

Sneh accepted the offer and made several visits to Hisar for treatment. During one such visit, she suffered an attack of hematuria and started to bleed heavily when she urinated. The hospital in Hisar could not handle hematuria cases, so she was referred and moved to another facility in Ludhiana. She remained at the Ludhiana hospital for two weeks without much relief.

She was in a lot of pain and longed to be at home. Subhash decided to bring her back to the hospital in Ambala. I was on a business trip to the Middle East at the time and decided to make a detour to visit her. Upon reaching Ambala, I rushed to the hospital right away. Sneh was in the emergency department. Looking pale, exhausted, and in acute pain, she slowly and, with obvious effort, opened her eyes. Looking at me, she smiled broadly and asked, "When did you come?" I put my hand on her head but couldn't utter even a single word.

After a while, I asked, "Are you okay?"

Instead of answering my question, she asked, "Did you have anything to eat yet?"

Soon the doctor and a nurse joined us, and the interaction between us took a different turn. I stayed with her and my brother's family for some days. I could only take a short break from my business trip, so I didn't stay long.

It was becoming extremely difficult and painful for Sneh to urinate. So, it was finally decided to move her to the Post Graduate Institution (PGI) of Medical Education and Research at Chandigarh. PGI surgeons operated on her to open her urinary canal, but her condition only worsened. Her whole body swelled up due to excessive fluid buildup, and she suffered cardiac arrest. Though Sneh had previously expressed her desire for Do Not Resuscitate (DNR), the treating physicians persuaded my brother

to let them revive her using heart defibrillators. The physicians then put Sneha on a ventilator in an unconscious state. She could neither open her eyes nor speak. Her condition did not improve. After remaining in a coma for fifteen more days, she finally passed away, leaving everyone who knew her in tears. In keeping with Sneha's final wishes, her body was donated to the PGI Anatomy Department for research and teaching purposes. Even while facing death, Sneha understood the importance of taking care of others – a lesson I would learn over and over in the course of my life.



At engineering school, I was eighteen, and away from home – and from family – for the first time. I enjoyed the freedom of living in a dormitory and pursuing extracurricular activities. The school had a soccer field, tennis, basketball courts, and a very well-equipped gym. I had always been self-conscious about my small stature. Now that I had access to the school gym, I obsessively worked out and played tennis, but paid little attention to my studies, doing just enough to pass the first three years of school.

During the early 1970s, a trend developed in India in which bright students applied to universities in the United States. Most students who went to the USA stayed there for better career and economic prospects. During my senior year, I also applied to continue my education in the USA. Even though I was far from the top of my class, I was offered a non-scholarship, conditional acceptance from Arizona State University (ASU); I needed to improve my grades and had to earn the equivalent of a GPA of 4.0 in my senior year.

After finishing my final exams in the engineering school, in Allahabad, I came back to Ambala to wait for my results. I was very anxious as I needed to score in the top 10% of my class for that year to graduate in the top 25% of my class overall to meet the provisions of my acceptance to ASU.

I also had not been offered any financial support from ASU. Brighter students from higher-ranked schools were very much

sought after and were all offered scholarships from prestigious universities in the United States. These students had no problems obtaining a United States visa. Students, like me, had to arrange not only their own financing but had to struggle to obtain a visa.

Whenever I returned to Ambala, Sneha was especially kind to me. She understood my situation and was very encouraging. It was hard for me to eat when I was worried or anxious, but she would make my favorite foods-- vegetable curries, lentils, raita, rice, pickles, and chapatis - simple, but made with love - and tell me that it would all work out. Her confidence in me was very soothing. When I finally received my results, I was thrilled to find out that I had met the conditions for my admission to ASU. At the same time, my anxiety and worries increased tremendously, now that my dream was so close to becoming a reality. I wanted to go to the United States, but I wasn't sure I would be able to arrange the financing and obtain a passport and visa.

Kasauli had neither a passport office nor a bank with a lending facility. Ambala, on the other hand, had banks but no passport office. The nearest passport office was in Chandigarh. Ambala had frequent bus service to Chandigarh. For me, there was no other option than to make Ambala my home base from which to pursue my passport and loan. So, instead of going home to Kasauli for the summer that year, I stayed with my brother and Sneha.

India was incredibly bureaucratic then, a legacy of the British from the pre-independence days. Getting a passport often took six months or longer and required the submission of many documents. Corruption amongst government officials was rampant. Rather than mailing the documents, it was preferable to hand-deliver them. The government officials whose desk my files crossed raised all sorts of trivial questions. Even to keep my file moving through the departments was not easy. It took a lot of pleading with every lowest level employee. I must have traveled to Chandigarh by bus two or three times a week for six months to keep my files moving. (The round trip journey took 4 to 5 hours.) It was extremely frustrating. Back home, my brother was busy at work, my great-grandmother had passed, and my grandmother had no idea about these things. The only person I could share

my frustrations with was Sneh. She was always encouraging and supportive. She listened to my frustrations, cooked for me, and made me feel that everything would work out in the end.

In addition to acquiring a passport, I also had to think about applying for a loan to finance my expenses at ASU. My father, although not outright hostile to my plans, was ambivalent about me going to America. He had always been a nationalist and considered India to be the best country in the world. Besides, America had always favored Pakistan over India, so India aligned with Russia. There were no TVs in Kasauli or internet in those days, so the only information people had was what they read in the newspapers, which were mostly controlled by the government. He was not thrilled and did not care if I went to America or not. I, on the other hand, had heard so much about America that I could not wait to go there.

I planned to apply for a student loan. Little did I know that you don't just apply for a loan at the bank and get it; you have to arrange for guarantees and collateral. It was disheartening to see the amount of paperwork the banks required before even considering my application. It was only Sneh's encouragement and a bit of my resolve that kept me going. Finally, I asked my father to sign the forms for putting our house up as collateral. I am not sure what he thought, but I had always known that when it came to his children's education, he would not hesitate. After I told him what the form was, he did not even read it but just signed it. The process of getting the loan was long, arduous, and very frustrating at times, but Sneh made sure that I did not get discouraged or give up. She was always there for me and kept me going.

The American Consulate required all visa candidates to take an English proficiency test at the embassy before going for a visa interview with the consular. During my interview, the consular told me that I had failed that test. Also, only one out of four interviewees was being granted a United States visa. Maybe he noticed my ignorant exuberance or energetic personality, or the fact that I had the money to pay for my education and, so, had a low probability of becoming a public liability while in the United States, but, after meeting me in person, he decided to use his discretionary power

to grant me the visa. He seemed to be an angel in disguise, helping me to reach my destination!

With a bank draft for my first-year expenses to deposit when I registered at ASU, and \$8 in cash in my pocket (the maximum the Indian government allowed to expatriate in those days), I booked a Lufthansa flight from Delhi to Tokyo on February 4, 1972, bound for the United States. This flight was to be my very first time on an airplane.

It was a Boeing 747. When I got out of the shuttle bus, I stopped and stared at the plane for a moment before approaching it. It was beyond my imagination how high it stood above the ground – I was awestruck just by the size of it! Finally, I ran up the stairs to board the plane and was almost out of breath by the time I reached the door. Inside, each of the compartments was bigger than my classrooms at school. I had also never interacted with any foreigner before. The German flight attendants were very cordial, but I did not understand a word they said. I had never seen airplane food trays or used forks and knives to eat. I felt very self-conscious but, somehow, I managed to eat without spilling anything. I did not dare ask what I was eating, although I was almost sure the food contained some meat. My grandfather probably turned in his grave, as he was a very strict vegetarian and even had written a book about the scourges of meat-eating in the 1940s! It is hard to describe, but I felt both very excited and very scared about what was to come next when I reached the United States.

4

FLYING BETWEEN WORLDS

During the long course of his wife's illness, my brother wondered why Ambala couldn't have its own cancer hospital. He discussed this idea with fellow patients, doctors, nurses, and other staff members. One of his wife's oncologists suggested that starting a cancer hospital was not an easy task as it involved huge capital and other resources. The best option might be to create awareness about cancer prevention and the importance of early detection and timely treatment.

Based on this advice, my brother and his cancer-afflicted wife began visiting suspected and confirmed cancer patients at their homes. They simultaneously initiated conversations about the matter with their associates of eleven years at the Rotary Club of Ambala.

Their idea was to hold cancer awareness programs and talks and to do some screening work. The members gave their approval and sanctioned a small budget for the activity. In association with a few local doctors, they organized several programs comprising talks, video presentations, and interactions with doctors and social workers.

Meanwhile, the treating oncologist at Ludhiana agreed to the request of my brother to hold a Cancer Detection Camp at Ambala

in association with the M. D. Oswal Cancer Hospital and Research Foundation. He brought a fifteen-member team of cancer experts to Ambala, free of cost. The camp they organized had 350 people registered for cancer screening. Out of these, seven people were found to be positive for cancer. They were offered treatment at highly subsidized rates at Ludhiana, but only two patients could accept the offer because of the distance. This camp established the need for a cancer treatment facility in the town.

The year 2005 marked the completion of the first century of Rotary International. The Rotary Club of Ambala wanted to give the community of Ambala a project of long-lasting benefit. On my brother's suggestion, the club agreed to build a facility measuring 3,500 square feet for a cancer awareness and detection center. An ultrasound machine, X-ray, and mammography machine were purchased. They hired a part-time radiologist, and the facility started examining patients. After a year or so, a patient who had been confirmed positive for cancer asked, 'What should I do now?' The club members had to express their inability to provide any treatment. The patient wryly commented, "Sir, if you do not have any facility for treatment, then why do you tell poor people like us that we are in the grips of imminent death? Had you not confirmed our disease, we would have gone from this world in ignorance. Please think again if you are rendering a service or disservice to the poor patients."

It was a bitter truth that made the Rotarians think about establishing a bare minimum facility for cancer treatment. The members of the club got together again and decided to plan for a twenty-bed hospital. Under the leadership of Dr. Jai Dev, a Rotarian and very successful industrialist and philanthropist in Ambala, a charitable society under the name Rotary Ambala Cancer Detection and Welfare Society was established to work on the hospital project. Each member of the club committed to donating money, as per his/her capability, for a minimum of three consecutive years. A charitable trust of the town that owned a piece of land agreed to give that on lease for 30 years.

The hospital was built and inaugurated in 2010. They hired one physician, one general surgeon, and an orthopedic surgeon. The

radiologist and pathologist had already been working there on a part-time basis since the inception of the early detection center. The patients started pouring in. The doctors and other staff were quite dedicated and hard-working. In a short time, the hospital became known as a medical facility free from malpractices and committed to the overall well-being of its patients.

Strangely, though, cancer patients were not visiting the hospital. A visiting doctor solved the mystery by stating, "As the name of the hospital is Rotary Ambala Cancer Hospital, many patients hesitate to come here. Cancer is still a stigma in this society. People do not want others to know about their cancer. They are afraid that people would not prefer a cancer victim's family for matrimonial or other alliances. If you want them to visit the hospital, you must add the word 'General' to the name of the hospital and initiate other branches of treatment." The suggestion was accepted. The hospital added several branches, including ENT, pathology, cardiology, and nephrology, and also increased the number of beds from 20 to 50.

The hospital grew rapidly. Whenever I visited my brother, he would take me there to show me its current status. Each time I was astonished to see its progress. Something new, either a building or equipment or some new branch, had always been added.

Listening to my brother describe the difficulties faced by the hospital sometimes filled my heart with anguish, but at the same time, I was proud of the way these people were continuously pushing forward improvements.

In 2014, Pratibha and I visited India to meet with Subhash and his family again. Pratibha and Sneha had been very close, and after Sneha passed, Pratibha wanted to initiate something to help other cancer patients in Ambala. Pratibha's specialty was pain management, and she had run her own clinics in Buffalo and Colorado. This gave her the idea of starting a palliative care service at the Rotary Hospital.

At the very end of Sneha's life, her suffering increased daily as her disease rapidly progressed. Although well-meaning people

impressed upon her the futility of continued treatment and the necessity of avoiding aggressive intervention, there wasn't any alternative. Sneh, though very docile by nature, had also expressed her increasing unwillingness to continue taking strong medicines with terrible side effects. Watching Sneh undergo the indescribable hardships and sufferings at the hospital was unbearable to her family. Sneh longed to be at home in her final weeks, but there were no in-home palliative care services available to alleviate the sufferings of terminally ill patients in Ambala.

The memory of those scenes of anguish and unbearable pain prompted Pratibha to suggest commemorating Sneh's memory by starting a free in-home care service for terminally ill cancer patients. The hospital accepted her suggestion. We gave \$20,000 as seed money for the project and established a palliative care unit named 'Sneh Sparsh' (A Touch of Love) on September 29, 2014. This was the date in 1968 when Sneh married my brother and first set foot on the soil of Ambala. The whole thought made me a bit nostalgic.

In 2015, one major piece of equipment the hospital needed urgently was an MRI machine, a basic diagnostic tool. At this time, the hospital already had raised \$380,000, more than half the amount needed to purchase a new MRI.

The story behind the \$380,000 was very interesting. During the hospital's inauguration, Mr. Tara Chand Gupta, an NRI (non-resident Indian), came and toured it. He met the Chairman, Dr. Jai Dev, and expressed his desire to will his entire estate, worth \$475,000 in the United States, to the hospital for the benefit of people with cancer.

This NRI, though born in India, had migrated to the United States long ago. He had remained a bachelor and intermittently visited India over the years. He had witnessed his closest relatives dying in great pain because of cancer. He decided to donate his total assets to this hospital. It was a large and most generous gesture to the people of a small town like Ambala. However, \$200,000 more was still needed to buy the MRI machine. Furthermore, as the hospital had already grown into a full service, hundred-bed hospital, its

needs for funds were beginning to exceed the funding ability of the Rotarians and the citizens of Ambala. Establishing an endowment, if possible, would ensure the survival and growth of the hospital into the future. For the endowment fund to happen, however, the hospital needed to grow its donor base beyond Ambala.

5

PREPARING FOR THE TRIP OF A LIFE-TIME

I sold AirSep in 2013 and retired. At first, I welcomed the chance to simply enjoy life and do the things I had always wanted to do but didn't have enough time for, or couldn't afford. After three years, the novelty wore off. I felt it was time for me to give back to society. Getting involved with the Rotary Ambala Cancer and General Hospital was the perfect chance for me to align my interests and skills with that desire to give back.

Once I had settled on the idea of doing a solo round-the-world flight to raise money for the Rotary Ambala Cancer and General Hospital, I had my work cut out for me. I had to not only convince my family that it was a worthy project but to prepare myself and my plane to undertake such a journey.

Convincing and Getting Permission from the Family

Before embarking on a round-the-world (RTW) trip, first and foremost, the pilot should have the courage to undertake such a risky venture. I, for one, have always been drawn to taking risky adventures, even in other areas of my life. Even the thought of doing something potentially dangerous gets my adrenaline flowing, and my brain seems to go into risk denial mode. Once, at the Big Sky Ski Resort in Montana, USA, I persuaded my host to take me onto Lone Peak, a double black diamond, hardest difficulty ski trail, at

11,200 feet. I was 64 years old, a mid-level skier, and had not skied in years. Just looking down from the top was absolutely terrifying. I realized then that my skiing abilities were completely inadequate to handle such a slope. However, I made it down, of course, with great difficulty, coming close to death more than once. I prayed the whole way and promised myself that if I survived, I would never take on anything that risky again. But only a couple of years later, my adrenaline was flowing, and I was in risk denial mode again, ready to take on the risky venture of a solo flight around the world!

It isn't only the pilot, however, who needs courage when preparing for an RTW solo flight. The pilot's family must have courage, as well. In my case, I was retired with adult children, but I knew I needed the blessing of Pratibha, my wife of thirty-eight years, before I could finalize my plan. I should note, though, that ours was not a typical American matrimony – Pratibha and I had an arranged marriage.

When I received my green card in 1979, I had not returned to India since arriving in the United States in 1972. Until that point, I possessed only an F-1 student visa and had feared that I might not get another visa to return to the United States if I left. From 1972 until 1979, I had very little, if any, contact with my family back home. None of my family in India had phones, so we had not spoken by phone. The only contact was by letters once every three or four months with my parents. I might as well have been on the dark side of the moon as far as they were concerned. But, with my green card in hand, I finally decided to visit home. My mother, a loving and hard-working woman with only a fifth-grade education, had been a housewife all her life. She was, naturally, extremely proud when I traveled to the United States for my advanced studies. Now that I was returning with a Ph.D. and working for a multi-national, world-renowned corporation, she was overjoyed and probably bragged about me to anyone who would listen. Arranged marriages were still prevalent in India at that time and, unbeknownst to me, she'd arranged for me to meet someone while I was in the country. I had not given any thought to getting married and was upset with her for making these arrangements without talking with me first. However, seeing how excited and proud she was, I did not want

to disappoint her, and I reluctantly agreed to the meeting. It was arranged through a common family friend since neither of our families had ever met before.

Pratibha belonged to a highly educated and sophisticated family. She had just finished medical school. Her father, Dr. Sukhanand Jain, was a Professor in the ENT department at various medical schools, including the top-ranked All India Institute of Medical Sciences in Delhi. Her mother Sudha had graduated from the University of Toronto, in Canada, with a Masters in Mathematics. At the time of my visit in 1979, Pratibha's family lived in Hyderabad, in southern India, over 1800 kilometers away from Kasauli. As I planned only to visit my home in northern India, they agreed to meet us in Delhi at her uncle's house.

My mother and I traveled by taxi from Ambala to Delhi for the meeting. Pratibha's father's friend, Professor Kakkar, an ENT Surgeon in Delhi, greeted us. Dr. Kakkar had trained under Pratibha's father and was very close to her family. He probably had volunteered to size me up before deciding whether I should meet her. He was the only person in the living room. After exchanging pleasantries, the three of us sat down. After a few moments of silence, Professor Kakkar asked, "Young man, what is your plan for the future?" I was caught completely off guard with this question. All my life, I'd only ever focused on struggling to get through the present. The only answer I could come up with was that I'd never thought much about my future. I guess he did not expect such an answer and did not know what else to ask. Without saying anything else, he got up and walked inside the house.

My mother and I were now by ourselves, and I was sure that Dr. Kakkar would advise Pratibha's family to cancel the meeting. I was pretty upset with my mother for having put me in such an awkward situation. I told her this was the end of arranged marriage for me, and to never to set any such meeting again. But, to my surprise, Dr. Kakkar returned a few minutes later and invited us to come inside to meet Pratibha and her family. After a few minutes of polite conversation and having tea and snacks together, my mother and Pratibha's family left us alone in the room to talk and get to know each other. I can't think of a more awkward moment in my

life! We tried to make small talk about our school days and about Hyderabad and Buffalo. After about half an hour, the meeting was over, and my mother and I were back in the taxi on our way to Ambala. I was convinced that Pratibha's family had only allowed me to meet her to be polite. I assumed that, based on the conversation I'd had with Dr. Kakkar, there was no way they'd want Pratibha to marry someone as careless as me.

After returning to Ambala, I focused on other things and didn't give much thought to our meeting in Delhi. A few days later, my brother received a phone call from Pratibha's father saying that both she and her family thought that we would be a great match for each other. My mother and everyone in my family was very happy and excited to hear this. For me, though, things were happening faster than I could comprehend.

In India, marriage is viewed differently than in the United States: marriages are as much between the families as they are between the engaged couple. Whereas my family wanted me to agree at that instant, I did not want to rush. But when I reflected on the meeting in Delhi, as short as it was, I realized that we'd both liked each other and enjoyed each other's conversation. Finally, I agreed. Even the simplest weddings in India are elaborate and take a great amount of preparation. So I came back to the United States with plans to return to India for marriage when the arrangements were ready. Pratibha and I married three months later in Delhi on April 13, 1979, a day that happened to fall on a Good Friday. I flew back to the United States three days later, alone.

It took a couple more months for Pratibha to get a United States visa. She finally left India in July. I met her at JFK in New York, and we spent our first day in the USA together in Manhattan. Our adventure of a lifetime was just beginning -- we were married but hardly knew each other!

We flew to Buffalo the next day. Our main goal was to get to know each other and to begin building a life together. Pratibha had completed her medical school education in India, and, after passing the exam for foreign medical graduates, she received an offer to join the residency program at the State University of New

York at Buffalo. Within weeks of arriving in the United States, she was busy working 80-120 hours a week at the hospital. She was only twenty-four then and had incredible energy! Many times, even after working 36 hours on-call, I would pick her up from the hospital and drive us directly down to the Holiday Valley ski resort near Buffalo to ski. Amazing as it may sound, and even though we had an arranged marriage, we discovered that we had much in common. We were both free spirits who enjoyed skiing, riding motorbikes, flying, and watching sports.

By the time I began planning my RTW flight, we'd been married 38 years, had raised two sons and were still having fun together. We had flown together; over the mountains (rugged Rocky Mountains, Grand Canyon, and Mount McKinley), the fjords, glaciers, and volcanoes (in beautiful scenic Alaska), and an ocean (Turks and Caicos in the Bahamas). Having flown with me enough times, over terrains similar to what I would face during my RTW flight, she had gained full confidence in my flying abilities. Even then, she did not want me to take such a great risk with my life, but she understood my adventurous spirit, given that she had one herself.

I explained to her how important attempting the solo RTW trip, and using it to fundraise for the cancer hospital in Ambala, was to me. I reasoned with her that both our sons were adults with independently successful careers and that she was also financially independent, with her own thriving medical practice. If something happened to me, it would be a difficult emotional loss for my family, but it would not force their lives into hardship. My family was, of course, worried about my safety but, knowing how much I really wanted to do it, they finally agreed, and once they agreed, they supported me with full hearts.

Once the pilot's courage has been assessed, and the family has given their permission, there are still many other things to consider before undertaking an RTW trip:

There are generally two sets of rules when flying an aircraft: VFR, Visual Flight Rules, and IFR, Instrument Flight Rules. A pilot may decide to use one of these sets of rules. The choice typically depends on the weather.

VFR are a set of rules and regulations established by the FAA (Federal Aviation Administration) under which a pilot flies an aircraft in weather conditions that are generally clear and where the pilot can see the aircraft's route direction. A pilot flying under VFR is required to observe outside the cockpit to navigate, avoid other aircraft and obstacles, and to control the aircraft's attitude. VFR usually means that you are flying without definite control from Air Traffic Control.

When the weather is below VMC (visual meteorological conditions), a pilot has to use IFR, which means that they control the aircraft through the instruments' reference instead of the pilot's visual reference. IFR is a set of rules and regulations established by the FAA to administer flights under conditions where using outside visual reference is not possible due to limited or no visibility. An IFR flight flies based on information from the flight deck instruments and navigation (by reference of electronic signals). When any pilot flies under IFR, he is required to be under the direction of ATC (Air Traffic Control). ATC instructs the pilot regarding the aircraft direction, course, speed, altitude, etc. IFR is imperative in weather with visibility less than two miles. However, to fly under IFR rules, a pilot must have training for IFR rating.

It is not mandatory for a pilot to have IFR rating to fly around the world, but not having an IFR rating would mean you could only fly in VFR conditions. It is not often that the weather meets VFR conditions during the entire duration of long flights. Not having IFR experience can also prove dangerous if the weather deteriorates unexpectedly during long flights. Many such mishaps have happened, the crash of John Kennedy Jr.'s plane off the coast of Martha's Vineyard in 1999 being one of the most well-known of these. Additionally, some countries (e.g., Japan) require special permits for foreign registered planes to transit their airspace for pilot having only VFR rating. For these reasons, pilots should have an IFR rating for a round-the-world flight. Luckily for me, I had established my IFR rating years prior to the trip.

Physique

The pilot should be healthy enough to be able to fly five or six hours every day for several weeks. They should be able to adjust to time changes and international foods. They should not have any medical condition that would prevent them from flying. I was sixty-eight years old when I flew my RTW flight. I was diabetic and had high blood pressure, high cholesterol, pre-glaucoma, and an enlarged prostate. However, all of these conditions were under control with medication.

Aircraft

The degree of RTW difficulty depends on the capability of the aircraft. Boeing 777s fly around the world every day without any problem. However, it is not so easy to do the RTW flight in a smaller plane. A certified plane that has a good range (1000 nautical miles), with a ceiling able to get above the weather (over 20,000 ft), is ideal. Experimental planes complicate the logistics greatly.



My Columbia 400, N2526B

Resources

RTW flights are expensive. Because most of the flights are international, the cost of logistics support, permits, handling, fuel, and hotel/meals can be as much as \$100,000.

The amount of time required for an RTW flight is unpredictable. It depends upon the weather, the availability of overflight permits,

and the plane's reliability. It could potentially take anywhere from two weeks to years. Since I was retired, time was not an issue for me.

Weather

A very common saying among pilots is: "It is better to be on the ground and wishing you were flying than to be flying and wishing you were on the ground." If the weather is bad, one must not fly. However, for an RTW flight, the typical distance for most legs is 1,000 miles. Very rarely will the weather be perfect throughout that distance. The pilot must be realistic in his decision making. If the weather is not perfect, but good enough to fly, they should likely go. Waiting for perfect conditions may cause the RTW flight to take a very long time to complete.

Potential for Engine Failure

Engine out landings are survivable over land because planes can often glide for miles, allowing the pilot to make a safe emergency landing on a road or in a field. Though one must practice and feel comfortable making such landings.

However, for a round-the-world flight, almost 70% of the flight is over water. The potential for a water landing in case of an engine failure presents the biggest risk for pilots undertaking such a flight. The chances of making a safe water landing in a fixed gear plane like mine, without cartwheeling, disintegrating, and sinking, are slim. Even if the pilot is fortunate enough to make a safe water landing, they must be able to survive until rescued. Finding a tiny plane or pilot in the vast ocean may take hours, days or weeks. Pilots who know how to use flares, smoke, or mirror signals can greatly improve their chances of rescue.

Engine failure can happen anywhere and would be especially devastating over the remote iceberg-filled waters of the North Atlantic. There the water temperature is 30 degrees, and the outside air temperature can be as low as -40 degrees. Insurance companies require that while flying over the North Atlantic, pilots wear a cold-water survival suit and carry an off-shore life raft.

Additionally, all pilots must take water survival training before attempting RTW flights.

Over Water Survival Training

For my RTW flight, I purchased a premium cold water survival suit and an ultra-light off-shore life raft. I also bought a custom packed survival kit containing flares, a signaling mirror, first aid kit, dehydrated food packages, and a water purifier.

I had never used any of the above equipment before, so I arranged to take water survival training from Mr. Randy Boone of Aviation Survival Technology over water in Gulf Shore, Alabama. Randy had been a water survival trainer for the United States Coast Guard. After retiring, he became a distributor of survival equipment and offered survival training as part of his business.

I flew to Gulf Shore, Alabama with Subhash to take the training. Randy was waiting for us at a swimming pool that he had rented for 4 hours that day to train me. He had brought his son and wife with him. The whole family was polite, soft-spoken, and well-versed in the art of water-survival training. I do not swim and am very scared of water but, after meeting and speaking with them, I had a feeling of confidence and enthusiasm.

The first thing I needed to do was wear a survival suit. The large amount of insulation in these suits makes them very bulky and heavy. The body length, water-tight zipper on the suit is hard to open and close. The suit also includes a watertight hood and face seal to protect from water and wind exposure.

Putting the suit on for the first time was difficult. The watertight fit of the hood and the closing of the face seal made me feel extremely claustrophobic. These suits are made to keep you floating, but for a non-swimmer like me, jumping in the water wearing it and trusting that it will keep me afloat was even harder. As soon as I jumped into the swimming pool, I began to hyperventilate. Randy's son swam with me and tried to calm me by pushing my torso up to keep my whole body at the surface. After a few minutes, I started to gain confidence, began to calm down and feel comfortable in

the water. For the first fifteen minutes, we did nothing else but try to calm my nerves.

Next, I had to learn how to climb onto the raft. The raft had a rope ladder. Every time I tried to put my boot in the ladder steps, I rolled under the raft, and the raft toppled over me. I tried my hardest but could not do it. I got extremely tired trying this maneuver. Randy proposed trying another method, one that required holding onto the raft with both hands and flapping my feet to get my body into a horizontal position. Once in a horizontal position, I used my upper arm strength to pull my body onto the raft. I found this method much easier. I repeated jumping in the water and climbing on the raft many times. Then Randy gave me an incredibly well-prepared lesson in using signals to assist search planes. He also showed me how to use the survival kit to survive on the raft for weeks, if need be. I learned a lot and enjoyed doing it. But, honestly, my fear of water made learning how to egress from the plane, inflate the raft and get on it, just about the hardest thing I have ever learned to do.



The cold water survival suit



Ultra-light offshore raft

Afterward, Subhash, who had witnessed the entire training session, said, "I was completely horrified to see how hard it was for you to get into the boat. It is one thing to jump into the pool in the presence of Mr. Boone -- an expert in his field. But it would be entirely different, to meet with an accident and preserve your wits completely. Anyway, you have decided to go on the trip, so there

is no question of turning back now. One thing more, I would like to tell you that I didn't notice any sign of fear on your face. You looked calm, composed, and determined. I found that part quite reassuring." My brother's comments filled me with confidence. Even with all the difficulties, my overwater survival training was one of the most memorable and worthwhile experiences of my life. Randy is a most professional, knowledgeable, experienced, and sincere trainer who really wishes the best for his trainees!

Potential Avionics/Communication Failure

My plane has Avidyne Integra PFD (Primary Flight Display) and MFD (Multi-function Display) and two Garmin GNS 430 GPS Units. In the case of an electrical system failure, I carried a battery-operated portable GPS (Global Positioning System) and a satellite phone. I carried a Garmin Aera 796 Portable GPS unit. I subscribed to world Nav-data for the Garmin 430s. Americas Charts for MFD, and world charts for Aera 796 portable GPS. I also carried a Garmin InReach Satellite tracking system with SOS (Save Our Souls) capability and subscribed for unlimited texting and every minute tracking ability. Through the Garmin map app on my iPhone, and its Bluetooth link with InReach, I was able to continually stay in touch with my logistics support company as well as my family and friends, and they were able to track my flight the entire time that I was in the air. The map app also provided me with additional situational awareness while flying over the ocean.

I did not carry a hand-held com radio, but, in hindsight, I should have. Before starting the RTW, I not only familiarized myself with the operation of the backup GPS, radios and satellite phone but did a practice flight in the United States using the backup systems. I also checked all the operations and functions of the Garmin InReach satellite tracking device.

Search/Rescue

The pilot must carry a PLB (Personal Locator Beacon), satellite tracking SOS, and survival packs. When a pilot must make an emergency landing in a remote area or in the ocean, it generally is incredibly difficult for the search and rescue teams to locate

the pilot. The pilot must learn how to use flares, mirrors, or other signal devices to attract the attention of search parties, planes, or ships looking for them.

Potential for Mechanical or Maintenance issues

I carried oil, filter, oil changing tools, and a spare tire. I also arranged for oil changes along the route of my flight at necessary intervals in Italy and Kuala Lumpur.

Getting the Plane Inspected

I wanted to get my plane thoroughly checked out and have its annual maintenance done before I left on my RTW. Goodrich Aviation, my plane's service center is at the Binghamton, NY airport. Doug Goodrich has taken care of my plane since the day I bought it eleven years ago. He is the best aircraft mechanic I know, and I have absolute trust in his work. Over four weeks, he not only performed all the annual required maintenance but also thoroughly checked out all of the mechanical systems of the plane. He fixed anything and everything (no matter how small) that needed fixing, and after receiving a clean bill of health from Doug, the plane was ready to begin its journey.



My airplane mechanic, Doug Goodrich, and I

Lastly, before embarking on the RTW journey, I felt that doing a long practice flight in my plane to check out the economy settings, range, and accuracy of gauges would be a great confidence builder.

I picked up the plane from Binghamton and flew it back to Buffalo. For a long practice flight, I planned to fly it to Atlanta for a Rotary International Convention the following week, then to Alabama for my overwater survival training, then to Florida to relax and play some golf, and finally back to Buffalo, for a total of approximately 15 hours of flying time. That would be more than enough flying time for me to be confident that the plane was ready for my round the world flight!

Fund-Raising Preparation

Because I was flying around the world to raise money for the Rotary Ambala Cancer and General Hospital, I had to prepare for the fund-raising aspect of my trip, as well. The success of my mission depended on how much publicity I could generate for my flight and my ability to use that to raise cancer awareness and collect funds for the hospital.

My son, Rohan, set up a web site that described the purpose of the flight and would display live tracking of my flight path so anyone interested in following me and making a donation could do that. To keep my followers interested, I posted blogs about my daily experiences during my flight. The website www.raviworldflight.com also had links to the Ambala Hospital website.

My blogs were also posted and shared on some pilot associations that I belong to: IFFR (International Fellowship of Flying Rotarians), the Cessna Advanced Airplanes owners' association, and social media sites like Facebook and LinkedIn. Brochures for the hospital were printed to be distributed after scheduled talks at various gatherings of Rotarians.

The start date for the journey was carefully planned to be immediately after the annual Rotary Convention in Atlanta. Subhash and I set up a booth for the Ambala Hospital in the House of Friendship at the convention to promote my flight and to distribute brochures to the attending Rotarians. Incidentally, this

happened to be the 100th anniversary for Rotary International, and the keynote speakers were Bill Gates, the golfing great Jack Nicklaus, and Mrs. Rajshree Birla. The Birla family is one of the most generous philanthropists of India.



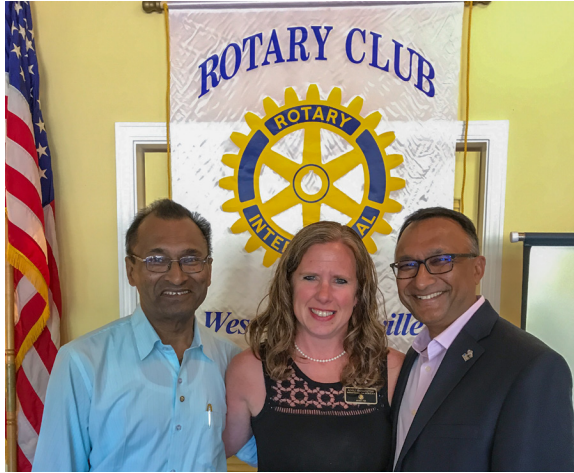
Subhash and I in our booth at the convention

Over 50,000 Rotarians from around the world attended this event, and we distributed more than 10,000 brochures.

I also had the opportunity to give a talk before starting my journey, as Ms. Adele Harrington, past President of the Westfield/Mayville, NY Rotary Club, stopped by our booth and invited my brother and me to attend their club meeting. On June 20th, we drove 70 miles from Buffalo to Westfield to attend their meeting. It was their installation meeting, and I was the featured speaker.

My PowerPoint presentation titled "Round the World Flight for Rotary Ambala Cancer and General Hospital" was well received. Even members not familiar with the complexity of such a trip seemed awed by this mission. After the meeting, the club president presented me with a donation on the club's behalf and their beautiful club flag to my brother to take back to India. Some members committed to donating individually as well.

Encouraged by my reception at the Westfield/Mayville, NY Rotary Club, I planned to do similar presentations at stops along the route of my flight. I also sent press releases to newspapers and TV channels in Buffalo and India in the hope that they would cover my story.



At Westfield/Mayville Rotary Club with Adele and Subhash

Documents

The international flight permit process is very document-oriented. I needed to carry the following documents with me:

Plane

- Airworthiness certificate
- Registration
- Owner's manual and weight/ balance
- Noise Certificate
- Pilot logbook with biannual review endorsement
- Logs showing pitot-static and VOR check currency
- Insurance certificate
- Border security decals

Personal

- Pilot License
- Medical certificate
- FCC (Federal Communications Commission) Radio License
- Passport and Visa for countries that require it

Route Planning Considerations

The four primary considerations for selecting the route are:

International Port of Entry Airports

Most flights will be international. I will only be allowed to enter countries through port-of-entry airports with CIVQ (Custom, Immigration, Visa and Quarantine) facilities.

Fuel Availability

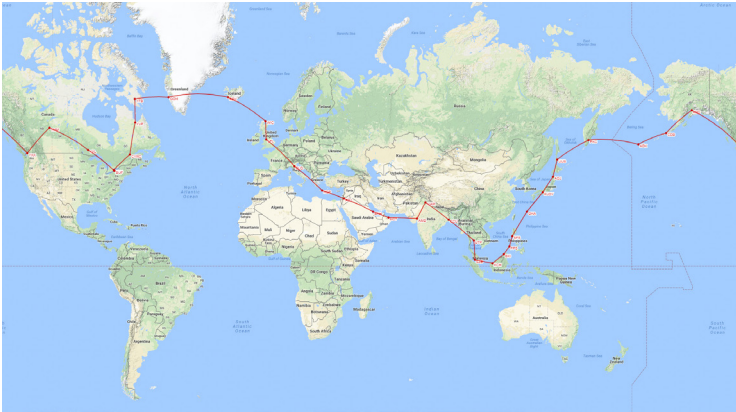
The Columbia 400 uses Avgas (Aviation Gas). Outside of North America and Europe Avgas is difficult to find; very few airports carry it. The route must have Avgas carrying airports within the range of my plane.

Range of Airplane

The Columbia 400 has a range of 1100 NM (Nautical Miles). For legs where Avgas carrying airports were not within the range of my plane, I carried 32 gallons of Avgas in a TurtlePac as cargo on the passenger seat. The TurtlePac was not connected to the fuel system of the plane. Its Avgas could only be transferred to the airplane tank upon landing. However, it made it possible for me to reach Avgas carrying airports as far as 1450 NM apart. Of course, it required a landing in between for Avgas transfer.

Airspace Overflight Permits and Visa requirements

The route of the flight must be over countries and locations where overflight permits are obtainable and must not have stops in countries where visas may be denied.



The round the world flight route flown

An RTW flight cannot be successful without an incredible amount of time and energy spent on coordinating the logistics for each leg of the trip. For a first time RTW pilot, it can be extremely time-consuming, frustrating, and expensive to complete. Using a professional logistics support company can simplify the whole process and is highly recommended.

A professional logistics support company knows all the procedures, knows where and how to fill out and file overflight permit applications, has the right contacts for ground handlers at all airports, and can arrange for fuel, hotel accommodations, and even aircraft maintenance if needed. They track your flight live, stay in communication with you during the flight, and can provide information about the weather along your route and at the landing airport. With the technology available today, a logistic support company can provide services to RTW pilots that are similar to the ones the Johnson Space Center in Houston provides for astronauts flying in space.

It is very important to set up the channels of communication with your logistics support and to get comfortable using them before the actual RTW flight. For example, you might use a satellite tracking device, such as Garmin InReach or Spidertrack, while in the air, and Facebook Messenger or similar while on the ground. It is also important to get to know and establish a comfortable working relationship with the individuals you will be dealing with at the

logistics support company. Ideally, potential RTW pilots should complete a few practice long flights to check communications with the chosen logistics support team.

I chose General Aviation Support Egypt (GASE) as my logistics support company and contacted Eddie Gould, its founder. He introduced me to his co-founder/partner Ahmed Hassan Mohamed. Our first order of business was to set up our system of communications and become comfortable working with each other.

The following is an edited transcript of our first text conversation:

EDDIE: *Hi Ravi and Ahmed, this is the 3-way thread for Ravi's upcoming RTW in his Columbia 400. Please say hi to each other. Ravi, Ahmed will become your main man when it comes to getting permits and fighting bureaucracy around the world...he is the top man at his job! This thread is ideal for quick chats concerning the flight. Emails are for the kind of stuff that needs to be archived and where we can share documents, etc. Best of luck to everyone. Let's make this a great and successful flight!*

MYSELF: *Hi Eddie and Ahmed, I look forward to working with you both.*

EDDIE: *Great stuff...good to have you here, Ravi. Ahmed is a very busy man as he is always working with flights in progress, so you will see more of him when you get underway, but rest assured that we will both be working in the background to support your flight, from the planning to flying to the adventures on the ground, and post-adventure, too.*

MYSELF: *I understand!*

EDDIE: *If you have Facebook on your smartphone, then download the messenger service...this will allow free voice and video calls using this service. If you don't have Facebook on your phone, then we recommend you download it.*

MYSELF: *I have both on my iPhone. By the way, will I need a satellite phone and High Frequency (HF) Radio for this RTW?*

EDDIE: *I answered that in the email I sent about an hour ago... did you receive it?*

MYSELF: *Got your email. Will get the satellite phone. HF radio I have to think about. I checked at couple avionics shops, it is pretty involved and I'd rather not, if it is not mandatory!*

EDDIE: *There are some countries that insist on it...Gabon for instance...but only Greenland insists on it (HF) if flying below 24,000 feet in the routes around the coast. This is where many of the airports are, though your route is over the ice cap and it is not compulsory there. Of course, if the weather over the ice cap is bad, then there is no alternative except wait it out as you would need HF Radio to fly around the coast. Russia may ask for it but I think the Satellite Phone will be allowed as a good alternative. We have a R66 helicopter doing the same route as you and he can't fit HF to the aircraft, so he is relying on the satellite phone for Russia and for over the ice cap in Greenland.*

MYSELF: *Thanks. I will do a bit more digging on this and decide. For now I'd rather do without it. I definitely do not want to fly over the North Atlantic in bad weather!*

EDDIE: *There should be great weather when you plan to cross. I think you will be fine with the non HF option. We have more pilots who fly without HF than who fly with it. Time for coffee here – will be back later...*

I still had many other preparations to do for the trip, however, and continued to communicate with GASE. Some of those preparations had to do with special concerns for the Russian leg of the trip. In Russia, English speaking pilots are required to stay on international airways only. If, for some reason, that is not possible, the plane must have a Russian speaking pilot/navigator on board. Also, arranging for Avgas at airports in the Kamchatka peninsula due to local regulations is especially difficult. I decided to use Evgeny Kabanov, a native Russian very familiar with local regulations, as additional logistics support, specifically for Russia.



Ahmed Mohammed Hassan



Evgeny Kabanov

In the months leading up to my RTW, I was in regular contact with Eddie and Ahmed about many different aspects of planning for the trip. It was amazing how many details we needed to address.

In March of 2017, I consulted with Eddie about trying to secure sponsors for my flight:

MYSELF: *Not so good news from Jeppessen, They refused my request to sponsor my flight! Anyway, so be it, I have to move on with my plans without their help!*

EDDIE: *It's never easy getting sponsorship. Unless you are using something that the company wants to sell, it is hard to persuade them to come on board. One previous client had to wear a special brand of sunglasses and film himself eating some special energy bars during the flight! But you may have more luck if you approach the Rotarians and see who is in the membership that could be of help...do they have a newsletter/ magazine that you could put an article in?*

MYSELF: *I had the president of the Cessna Advanced Aircraft Club write to Jeppessen for me. It did not help. Anyway, I asked them to reconsider in light of the fact that I will be the first person of Indian origin flying solo in a single engine plane and will get lots of publicity for my sponsors in India. I don't have much hope, but it is worth a try!*

EDDIE: *You never know...fingers crossed...*

Later that month, Eddie helped me navigate the intricacies of insuring the flight, and providing the proper insurance

documentation that would be required for overflight permits in various countries:

MYSELF: *Hi Eddie, I am trying to arrange for insurance for my RTW. They need to know what countries I will be traveling through. I am still not sure what return route I should be exploring after India. I am depending on GASE for recommendations. Any idea what I should tell the insurance broker?*

EDDIE: *Hi Ravi, I think you should apply for all the countries that will be covered in all the planned routings...it isn't a problem if you miss some countries, but trying to add countries halfway into the flight would be a pain! Give me a few minutes and I will give you a country list based on our suggestions and your remit.*

I also shared with Eddie my various planning successes along the way, including receiving an Aircrew card that would allow me to use the pilot and crew security lanes in the airport:

MYSELF: *Received my Aircrew card from Jetex!*

EDDIE: *Nice one...it will help in some sectors...just need the gold braid and stripes on your shoulders now..*

MYSELF: *Got all that already! Anyway, flying from Buffalo to West Palm Beach in Florida tomorrow morning. Will try out my tracking device and share the tracking with you all. Let us see how it works out.*

Soon, I was practicing communicating with Eddie during some of my test flights

MYSELF: *I'm starting my trip. Follow along at my MapShare site!*

EDDIE: *I have you...still flying at 192 mph...7,425 ft abeam Vero Beach*

Although sometimes Eddie reminded me that there was a major time difference between the United States and Cairo:

MYSELF: *I completed my water survival training today in Alabama. Heading home to Buffalo. You can track if you like!*

EDDIE: *good for you, but it is coming up to 1:00 AM here in Cairo and I was about to go to bed. I do nights when flights are in progress on the other side of the world.*

MYSELF: *Sorry, I did not mean to wake you up. I was just practicing using my InReach.*

EDDIE: *No worries. I wasn't in bed yet. I was finishing up some work for the other RTW going into Mexico. Bed in 5 minutes...*

By this time, I was still three months away from my RTW and felt happy that both my communication channels, the InReach Satellite tracker I used during flights and the Facebook Messenger I used while on the ground, were in synch with GASE and working properly, as shown by the following transcript:

EDDIE: *I got your inReach messages...I replied but you may have been busy talking to Air Traffic Control (ATC)...I saw you just arrived at Palm Beach, Florida.*

MYSELF: *Thanks Eddie, good to know it works. I did 995 NM non-stop. I had 19 gallons (1.5 hours of flying time at 13 gallons per hour) left. I flew at an altitude of 14,000 feet with 47% power. Basically the engine did what it is supposed to do. Only thing is, I had almost 30 NM tailwind all the way!*

EDDIE: *Still, getting 995 NM is making me happy...fingers crossed for those kind of winds on your RTW. Looks like you have a good machine there and if you felt OK, comfort wise and the flight didn't exhaust you, then things are looking good. Now, think: could you do the same flight or more tomorrow, and the next day, and so on?*

MYSELF: *I am sure I can.*

EDDIE: *We will be asking you each day how you are and checking on your energy and mental levels...and will suggest a rest day if we think you need it.*

Early in April 2017, I was also able to rely on them when it came to considering what purchases were necessary for the RTW:

MYSELF: *Hi Eddie, I am thinking of buying two 25 gallon drum TurtlePacs that can sit on the passenger seats and be secured by seat belts. These will take care of the issue of not being able to get Avgas at Anadyr (Russia). Maybe I can fill them at Magadan (Russia), fly to Anadyr, transfer the fuel from the packs into my tank, and then fly off to Nome, Alaska? That would make my flight through Russia possible. Do you know if anyone has used them or are there issues I should be concerned about?*

EDDIE: *we have nothing but praise for TurtlePac. Many of our flights have used this method, either as fuel storage or they have them actually plumbed into the fuel system. I can show you a number of photos of some of our solo pilots who had a TurtlePac on co-pilot seat.*

MYSELF: *Great. I do not intend to plumb them into the fuel system. That is a whole new ball game and will cause Federal Aviation Administration (FAA) issues I do not want to deal with.*

EDDIE: *Just keep a check on your Maximum Take-off Weight (MTOW) with fully loaded tanks.*

MYSELF: *My pay load is 1100 lbs. so even fully loaded with gas I can still carry 500 lbs. I am 150 lbs. and if I have 100 lbs. of survival gear, clothes, etc. I can carry 40 gallons of Avgas. That is all I would ever carry!*

A few days later, the conversation continued:

MYSELF: *I'm all set now with the TurtlePac and pump! Another question, what airport do you recommend in the Liverpool area for my port of entry point from Iceland into the U.K.?*

EDDIE: *I need to check for fuel availability and prices. I will get back to you shortly.*

MYSELF: *Nothing urgent here, get back to me whenever you can.*

EDDIE: *It may be that Liverpool John Lennon Airport may be OK for you. Old friends of ours are the FBO (Fixed Base Operator) at Liverpool and, if we can get a good deal with*

them, then nothing wrong with going there. If you are going to be in Liverpool (city), then there is no real entry airport close enough without a long commute.

MYSELF: *Another question: can the InReach be used as a backup navigation system or do I need to buy a handheld GPS such as Garmin 796?*

EDDIE: *I don't think the InReach system can be used as a backup navigation system. Not sure about pricier models or add-ons...but it's better to get a hand held GPS as a backup.*

MYSELF: *What handheld unit has worldwide charts? Are you familiar with Aera 660 portable GPS from Garmin?*

EDDIE: *I will ask our previous RTW's what they used and their thoughts...*

A few days later I wrote:

MYSELF: *Hi Eddie, just to keep you in the loop I received my original invitation letter from Russia today. I have filled out my Flight Crew visa application and will submit it to the Russian embassy early next week. I applied for a one year multiple entry flight crew visa. I just hope I get it. I will keep you posted. I am still hoping to depart on July 4th and make it to Russia mid-August.*

EDDIE: *Sounds good Ravi...If you are in the air on July the 4th or after, then we will have four circumnavigations going at the same time! Should be interesting. I will be in touch very soon to start putting things in place. I'm just getting two of our RTW's into Russia first.*

And, finally, on June 7th, I began to correspond with Ahmed:

MYSELF: *I got my Russia Flight Crew one year multiple entry visa today!*

AHMED: *Congrats Ravi! When can you send us the aircraft and crew documents?*

MYSELF: *Let me know what documents you need. I can send them anytime. My planned date of departure is July 4th.*

AHMED: *Airworthiness Certificate, Aircraft Registration, Insurance. Radio license for aircraft, not crew. Noise certificate* Last check release page from Tech log. Your passport, license, and Medical. Are you using a US passport? Do you have an Indian passport? Are you planning to use it in India? Send us your route with dates, Estimated Time of Departure (ETD) and Estimated Time of Arrival (ETA) in Zulu (Zulu or UTC, Universal Coordinated Time, is the standard time at Greenwich England used by pilots worldwide) at least for the first part of the route until Egypt.*

MYSELF: *I sent the documents by email. I will be carrying a US passport and I have a valid visa for India for 10 years. I want to start from Buffalo July 4th. I'd like to finish by Sept 1st. I will try to guess the dates of the first part of the trip and send that in a day or two. My worldwide insurance coverage should begin next week. I'll send you a copy.*

AHMED: *Brilliant. Thanks Ravi! You may have noticed I put an asterisk next to noise certificate. Usually the FAA doesn't issue a noise certificate for your kind of aircraft so you need to make your own:*

MYSELF: *I've read through the FAA document about noise certificate and see what I need to do. However, if you can send me a similar form filled out by someone that I can use as an example while making one for my plane, it will help tremendously!*

AHMED: *Here is the noise certificate from N19MT, you can use as a guidance along with the document I sent you.*

At the end of June, I checked in with the GASE crew again:

MYSELF: *Hi Eddie/Ahmed: as you know, I plan to start my RTW on July 4th and it is getting pretty close to that now. Do we need to do anything that takes time at this point? Or do I just start and we file papers or flight plans as I go along? I have traveled to Canada many times before and I have CANPASS, so nothing is required for the Canada legs except for filing flight plans and eAPIS form. But I am concerned about Iqaluit-*

Nuuk, my first international flight out of North America. Please let me know when and what we need to do. Thanks!

AHMED: *Hi Ravi ... We will be assisting with arranging handling at Nuuk and other locations, helping arranging accommodations, etc. We will be in touch on every flight through tracker and through Facebook Messenger, during your ground time between stops. We will make decisions together.*

... In regards to ETDs/ETAs and weather as well as airports opening / closure etc. we will be with you all the way, will make sure all is going as planned, and can have a Plan B ready, if needed, at a minute's notice.

The following day, Eddie and Ahmed began working on additional logistics for my trip:

EDDIE: *Hi Ravi, I have been going through all emails and message threads to make sure I am up to date with where we are at. The first thing I want to check on is what you would like us to do about accommodations on your trip. We do have a great service for finding accommodations based on the pilot's remit and we get some fantastic discounts. If you want this service (99% of our crews do), then our first job would be Saint-Honoré? What we have with another RTW on the go at the moment is a spreadsheet like yours but he has a column where he has 'accommodation' and puts in each cell, whether it is to be arranged by GASE or by whoever may be hosting him. For instance...Reykjavik - Hotel GASE....UK stop - Hotel by Rotary club (something like that).*

MYSELF: *Let us start with accommodations at Saint-Honoré, Iqaluit, Nuuk, and Reykjavik.*

EDDIE: *No problem, we have supplied accommodations at just about every stop on your RTW. ...this is a highlight of our services that pilots have praised us for. Although some places we have found, have meant the pilots have liked it so much they have asked to stay longer!*

MYSELF: *Looking forward to working with you!*

EDDIE: *We have another RTW asking for suggestions for aircraft insurers for his RTW...who you are using?*

MYSELF: *I am using “Endurance American Insurance Company”. My brokers were Aviation Insurance Managers, Inc., Uniontown, Ohio. Attached are my current insurance certificates. Let me know what else is needed. Thanks!*

AHMED: *Hi Ravi got it. Thanks. Can you point out where it says worldwide coverage or the countries covered?*

MYSELF: *From what I understand, as the first page does not specify or exclude any territories it means worldwide coverage. The EU requires certain specific supplementary coverage. That supplemental EU Insurance coverage is attached as well.*

AHMED: *I got the EU one but we need the insurance certificate to clearly mention worldwide coverage otherwise some Civil Aviation Authority (CAA) may not accept it and it may end up causing delays. These insurance companies and CAAs are like lawyers. Very tricky. We have seen some people experience delays because of some wording CAA didn't like or can't easily find. So better safe than sorry!*

MYSELF: *Please let me know if this endorsement along with what I sent before will suffice. (Attached)*

AHMED: *Got it. Yes, that sounds fine.*

On July 1st I wrote:

MYSELF: *Hi Eddie/Ahmed, the weather forecast seems good for me to start on July 4th.*



My preparations – once I'd secured my visa – were much less detailed when I first left India for the United States. No one from my family had ever traveled abroad, and no one knew the location of Arizona. I had applied to schools randomly from a list of schools prepared by the American Consulate. ASU happened to be at the top of that alphabetical list. My brother-in-law told me that America was a very cold country and so I must take warm winter clothes with me. I had never worn a suit or tie before, but, for my first journey to the United States, I wore a woolen suit with a tie

and carried a woolen blanket that my brother-in-law purchased for me on the way to the airport.

The Lufthansa flight from Delhi made its first stop in Bangkok at high noon with a temperature of 100 degrees and the sun at its zenith. Unfortunately for me, the Bangkok airport did not have ramps that connected the terminal building with the plane for disembarking. Instead, we had to climb down the staircase from the plane and then walk a couple of hundred yards to the terminal building. I am not sure what people thought of me walking under the blazing sun in my woolen suit and carrying a blanket. One asked me if I was going to Alaska. I did not know what the word Alaska meant, and I was too scared to respond!

Finally, I cleared US customs in Honolulu, Hawaii, and reached Phoenix, Arizona, at midnight. I collected my luggage and walked outside. The people I saw all looked alike to me, and they all spoke very softly and used gestures I had never been exposed to before. I was terrified. I asked a taxi driver how much it would cost to go to ASU and he said \$16. Since I did not have enough money, I walked back inside the terminal and stood in a corner, contemplating what to do. I must have looked lost and alone because a lady at one of the counters walked over to me and asked if I needed help. Seeing how scared I was, she took it upon herself to find out who was the Dean of Foreign Students at ASU. She called this person and woke her up at midnight. I had not informed ASU that I was coming, so nothing was set up for me. Despite this, the dean, Mary H. Blain, arranged a dormitory room in the middle of the night and asked that the woman at the airport, Ms. Gwen Grey, help me get to the dorm. After her work shift was over, Gwen gave me a ride to ASU. Like the consular official at the American embassy in India, Gwen and Mary were angels in disguise, selflessly helping me along on my journey.

The Dean of Engineering appointed Professor Charles Backus as my advisor. In those days, ASU had very few international students. The first order of business for me at ASU was to meet Dr. Backus. I believe I was his first international student ever. Due to our accents, we both had great difficulty understanding each other. He was not familiar with the engineering curriculum in India, and I could not

properly explain the scope of courses that I had completed. He felt that, for me to get a good start, I should repeat most of the senior-level courses before taking any graduate-level courses at ASU. I told him that, due to limited finances, I could not do that and that I must start graduate school right away. He was not confident that I would be able to handle it but reluctantly agreed. He put a letter in my school files indicating that I did not take his advice and that he was concerned about my future at ASU.

It indeed was a struggle for me to get through my first semester of school. I decided to take the following summer off from classes, as international students were allowed to work to earn some money to support themselves. Not having any mode of transportation, I took a job at a car wash within walking distance of my home. It was minimum wage (\$1.35/hour at that time) and very hard work, standing outside in 100-degree weather, wiping the windows of the cars coming out of the car wash. Cars came through non-stop from eight in the morning until five pm. I earned \$75 at the end of the week and bought a used Suzuki 120 cc motorcycle with it. This was the first time in my life I had owned any kind of motor vehicle. Riding it was thrilling. Gas was 19 cents a gallon, and for less than a dollar a week, I could go anywhere. I got along well with the two hippie girls who worked there with me. After work, we all went to Minder Binder, a student bar near ASU, and drank 30 cent pitchers of beer. The carwash work was hard, but I was young and enjoyed hanging around with those girls. Life became fun. I felt as if I had achieved my life's ambition. Going back to school became the least of my priorities. Unfortunately, it all came crashing down four weeks later, when I overslept and reached the carwash 10 minutes late. The supervisor fired me on the spot. It shocked me how fast things could change. Little did I know that getting fired from my first job would be a pattern in my life and I would never be able to keep any job for long ever again!

Summer had almost ended by the time I found another job at Falcon Field Airport in Mesa, AZ. This rural airport was a junkyard for old US Air Force planes. It was 18 miles from where I lived, but I could easily get there on my motorbike. My job was to remove any salvageable parts from the old planes. Working in 110-degree

weather, under the extremely hot desert sun, was like working in hell, but I was again near airplanes, so I did not mind. I worked there for two weeks until the end of the summer. As I finished my last day of work there, the thought crossed my mind, wouldn't it be nice if I could one day fly into this field on my own little plane? This fantasy became a reality forty-three years later when I flew my Columbia 400 there with my wife in 2015 on our cross country flight. But it was all just an idle daydream back then!!

I studied hard during my second semester and, over time, gained Dr. Backus's confidence. I took several of his graduate-level courses in Nuclear Reactor Theory and Direct Energy Conversion and did well. To help me out financially, he even arranged a half-time assistantship as an ASU Radiation Safety Officer for me. As part of this assistantship, I went around ASU property with a Geiger counter to check for radiation and also kept track of the radiation exposure of all faculty and students working with radioactive materials in their research work. After I finished my Master of Science degree at ASU, Dr. Backus recommended me to one of his fellow researchers, Professor Richard Williams of the Georgia Institute of Technology, who needed a graduate student to assist him in one of his NSF-funded projects on solar energy. I had worked with Dr. Backus on a similar project, and he felt I would be a perfect fit for Dr. Williams. Dr. Williams agreed and offered me a research assistantship at Georgia Tech. I planned to move in September 1974 to Georgia Tech in Atlanta to work on my Ph.D. Dr. Backus's help was invaluable in making it possible for me to continue direct toward my life's next destination. He was my first mentor, and we are still friends and communicate regularly to this day.

When it came time for me to leave ASU for Georgia Tech, I posted an ad on the notice board at ASU seeking a ride from anyone driving to Georgia or anywhere nearby. A couple of days later, I got a call from a girl named Lynn who happened to be driving to Pensacola, Florida. In exchange for shared expenses and drive time, she offered me a ride to Mobile, Alabama. Mobile was on her way to Pensacola and had a direct bus service to Atlanta. I was thrilled with the offer and accepted. I gave her my address

in Tempe, and she asked me to meet her in the parking lot of my apartment at 10:00 AM the next day.

The following morning, I packed up all my things and hauled them down to the parking lot at 10 AM. Ten minutes later, a girl pulled up in a Ford Pinto and asked if I was Ravi. We shook hands and introduced ourselves. I told her I had finished my Masters at ASU and was now moving to Georgia Tech for my Ph.D. She was not an ASU student but had traveled out west from Florida to see more of the United States. She had stayed in Phoenix for a couple of years, partying and doing odd jobs, and was now moving back home. She looked like many of the other hippie ASU students, wearing jean shorts and a long, beaded necklace. Even though we had never met, she seemed to feel comfortable with the prospect of driving with me. But then she noticed the four boxes of stuff that I had packed. She'd already filled her little car with her own belongings and seemed annoyed that I had not mentioned my boxes when we'd spoken on the phone. I told her not to worry. I kept the one box that had my books in it and dumped the other three in the dumpster behind us. She gasped. I told her that all those household things were hand-me-downs from other students and didn't really have much value. I could certainly do without, or collect them again, from graduating students at Georgia Tech.

Although we'd broken the ice over my tossed boxes, we were still a bit awkward with each other at the beginning of our trip. But as the hours passed, and the desert landscape opened up before us, we started to feel more comfortable. I told her I was originally from India and had only come to the United States two years earlier to study. She did not know much about India and was curious to know what it was like to grow up there. We talked about Indian food, school life, and dating. She was intrigued by the fact that there were very few, if any, co-ed schools in India. Boys and girls did not mix or date at all until marriage. We joked and laughed about the differences between the Indian and American ways of life.

"How big is India, anyway?" Lynn asked.

“One third the size of the United States,” I said. “But three times the size in population!”

She laughed. “How can the population be so much when you guys don’t even date?”

“But Indian boys can get a girl pregnant just by looking at her” I joked

My reply amused her and it became a running joke between us. Every now and then while I was facing her, she would tell me to not look at her and then say, “If you look at me and I find out I’m pregnant after you leave, I am going to find you no matter where you are and come after you!”

As the hours went by, we talked about my life at ASU (the number one party school in the nation then) and her life working in restaurants and partying with her many friends. But now she was tired of it all and going back home.

Lynn’s Ford Pinto had a stick shift and no cruise control. Before this journey, I had mostly driven automatic cars, though I could manage a stick shift in a pinch. As a result, Lynn did most of the driving. By the time we reached Johnson City, Texas, we had been on the road for almost eighteen hours. Lynn admitted she was exhausted, and we decided to stop for the night. Neither of us had much money, so we found a cheap motel. Unfortunately, the motel had only one room left, and it only had one double bed in it. We shared an awkward look. “I don’t mind sleeping on the couch,” I told her, and we took the room. She showered, and then I showered. As I prepared to sleep on the couch, she was already in bed and said, “Ravi, it’s okay if you want to sleep on the bed too, it’s big enough.”

We were both very tired and soon fell asleep. We got up very late the next morning and did not start driving until noon.

By the time we reached Houston, it was 5 PM. The traffic was horrendous with cars packed bumper to bumper. I was driving, and we were on a slight incline. Instead of putting the car in neutral and applying the brakes, I balanced the accelerator and clutch to

keep the car from sliding backward. Lynn admonished, "Don't do that; you will ruin my clutch!" I suddenly disengaged the clutch, and the car slid backward, bumping the car behind us. The car I bumped was unscathed, but Lynn's new Pinto got a slight dent. She was already a bit upset about a comment I had made the night before, and putting a dent in her car made it even worse; we did not talk much after that.

We finally reached Mobile at 4 AM and found out that the bus to Atlanta arrived at six. There was no one at the bus stand. Lynn was still upset with me and dropped me off and drove away in a huff. I sat on the curb by myself and waited for the bus. To my surprise, Lynn returned after only 10 minutes and told me she was sorry and couldn't just leave me on the bus stop by myself like that. She decided to wait with me until I got on the bus. When the bus finally arrived, she kissed me goodbye. I watched her walk away, feeling wistful, and wishing she didn't have to leave. But I finally got on the bus to Atlanta. Despite our argument about the car, the past two days with Lynn had been a lot of fun, and I wasn't feeling so eager to begin my research assistantship. Working odd jobs and partying seemed much more interesting to me than the drudgery of studying. This was the mindset I had when I showed up at Georgia Tech the next day.

6

TAKING OFF

Before beginning my Journey on July 4th, 2017, my family took me to the temple on Saturday and a gurdwara on Sunday to pray and seek the blessings of the Gods for a safe journey and a successful mission. Once those ceremonies were complete, I was ready to go. There was no turning back now!



Performing Havan to get blessings of the gods for a successful journey

The Journey Begins

I had been preparing for a long time and was finally ready to begin my flight on July 4th. The weather forecast for that day was good. Since it was the first day of the journey, I wanted to make sure that everything was in place and working. It was most important that Eddie and Ahmed of General Aviation Support Egypt (GASE and I were in synch, so they could follow along and communicate with me during my flight.

I informed Eddie and Ahmed that I planned to make it to Saint-Honoré on Tuesday, Iqaluit on Wednesday, and Nuuk on Thursday. I asked them to book hotel rooms for me in those places.

Ahmed informed me that they usually booked hotels after the flight had departed and when it was confirmed heading to its intended destination. "The reason is, as you know, that when it comes to General Aviation there are a lot of variables until you are in the air, and nothing is certain. For example, weather diversions or high winds can lead to an additional tech stop en route and, by the time you depart again, your intended destination airport could be closed for the day," said Ahmed. I acknowledged this message and concurred.



Send-off with my family (from left to right, Nitin, Pratibha, Myself and Rohan), July 4th, 2017

With everything in place, I departed Buffalo Airport for St. Catherine's, Ontario, Canada, across the border from Buffalo and only 30 miles away, to clear Canadian customs.



Departing Buffalo (July 4th, 2017)

With all the commotion of getting the trip underway over, it was finally only me and my plane. After taking off from St. Catherine, I turned the satellite tracker on for the first time during my RTW flight

MYSELF: *On my first leg to Saint-Honoré. Can you track?*

EDDIE: *I have you on tracker closing on Ottawa from the south. 205 mph (you may want to change the setting to knots) 11,200 ft. Confirm figures close to actual.*

MYSELF: *Thanks. I am at 11,000 ft., 181 Knots.*

EDDIE: *Close enough. Can you confirm you have your accommodations sorted out for tonight?*

MYSELF: *Yes, I do. Thanks.*

EDDIE: *You did CANPASS?*

MYSELF: *Yes, I cleared customs at St. Catherine.*

EDDIE: *The tracker is updating flawlessly every 2 minutes... brilliant!*

MYSELF: *I am happy all is working as it should. I had a good flight today.*

EDDIE: *well done on completing the first day! Can you check in with us when you get the chance after each flight so we can discuss any problems, any good things you want to tell us about, and, most importantly, verify that tomorrow's flight is still on with any updated times, etc.*

AHMED: *Hi Ravi, do you have an ETD / ETA for tomorrow (an approximate should be fine)? We need it to inform the handlers at Iqaluit.*

MYSELF: *ETD 12:00 UTC. ETA 19:00 UTC*

Feeling happy with how things worked out on my first day, I checked into the hotel at Saint-Honoré. I planned to take it easy that first evening, so I could clear my mind and focus on flying. Setting into my hotel, I thought back to the first time I'd ever flown a plane, and how I would never have thought that I would someday be attempting a solo flight around the world.



I was fortunate to be admitted to Georgia Tech, considered one of the best engineering schools in the world. However, as always, I had little interest in my actual studies. Instead, I discovered the Yellow Jacket Flying Club. Tom Hartman, a fellow student and good friend, belonged to that club. Tom took me flying one day. I had never before been in a small plane. I loved the experience and decided to join the club and learn to fly. During the first few hours of lessons, the instructor did most of the flying to get me more comfortable with being in a small plane and to familiarize me with the controls and avionics. Then he slowly handed me the controls and let me fly. However, I was always very tense, and every time I felt even a little turbulence, I would hand the controls back to him. I must have overdone it – after about ten hours of instruction, he told me that I was not making progress and should consider another instructor. It took more than the average number of hours of instruction over the next two years, but I finally managed to get my pilot license in 1977.

I had great intellect when it came to engineering and could do well in any class with very little effort; however, I was often only interested in doing what was fun or enjoying whatever came my way at the moment. Worrying about the future was never a priority. Once I began taking flying lessons, getting my pilot's license interested me more than studying for my Ph.D. Not paying any attention to studies had consequences. Though I passed my Ph.D. qualifying written exams easily, I failed the oral portion twice and thought I would not be allowed to take it again, ending my stay at Georgia Tech.

Before beginning my flying lessons, I had taken two graduate-level courses in heat transfer from Professor Prasanna V. Kadaba and had done very well in those courses. He had always thought highly of me and was surprised that I did not do well in the oral exams. Dr. Kadaba knew of my ability to excel in class anytime I wanted to but had always wondered why it was that I did not apply myself. He told me that if I began taking school seriously, he would help me out. When I promised that I would, Professor Kadaba managed to get special approval from the school to let me take my oral exams one more time. With my back against the wall and this new opportunity in front of me, my fighting spirit kicked in. I worked hard and passed the qualifying exam.

During my classes with Dr. Kadaba, we had often discussed a heat transfer research project that interested both of us. Now that I had qualified, I chose that project as the topic of my Ph.D. research. Dr. Kadaba accepted my request to be my faculty advisor, and with his guidance, I completed my Ph.D. in less time than was taken by most students at Georgia Tech. Having a Ph.D. in Mechanical Engineering from one of the world's highest-ranking engineering schools opened many doors for me and, soon, I was recruited by the Linde Division of Union Carbide to work for them in Tonawanda, NY.

7

CANADA - GREENLAND - ICELAND

The Not-so Frozen North

After my first flight through Canada, I felt as if the real journey was just beginning. I knew that making too many stops during my RTW flight would be time-consuming and very expensive. To keep the time, expense, and logistics reasonable, each leg of the flight needed to be as long as possible. I felt comfortable that, with one good night's rest between each leg, I could concentrate and fly 6-hour legs over water. So, I planned each leg to be between 5 to 6 hours of flying time (800-1000 NM).

While most of the workload for a pilot is during take-off and landing, I was cognizant that a pilot can never really be at ease and must be vigilant at all times, especially while flying over water. Just like an anesthesiologist must watch the vital signs of a patient under anesthesia at all times and react quickly if any sign gets outside the normal limits, a pilot must watch the vital signs of the plane engine (the cylinder head temperature CHT, exhaust gas temperature EGT, turbine inlet temperature TIT, oil pressure, etc.). If any vital sign starts to drift outside the normal limit, the pilot must react and make changes to the engine settings, or catastrophic engine failure can occur. For my plane, the TIT and EGT must always be below 1650 °F, the CHT below 400 °F, and the oil pressure between 35-50 psig.

That first morning in Saint-Honoré, after a good night's sleep, I got ready early and took a taxi to the airport. I completed my preflight checks, took off, and texted to Eddie on my tracker:

MYSELF: *On my way to Iqaluit. Are you able to track me now?*

EDDIE: *I was waiting for your inReach message. I watched you take off but no message arrived. I checked the junk folder and there was your message! Do you have an ETA for your tech stop?*

MYSELF: *What is a tech stop?*

EDDIE: *You have a stop before Iqaluit - for fuel? That would be a tech stop (technical stop where you land and do something like fuel or customs clearance but do not stay overnight).*

MYSELF: *Yes I am stopping at Kuujjuak for fuel. ETA 16:45 UTC.*

EDDIE: *Copied on that. No worries...you will learn all our jargon before long! What we have to do for the majority of your stops is this: when you depart (it is hardly ever at the exact time as filed in Flight Plan) we send a movement report (MVT) to the agents at the next destination. This means they will have a better idea of when you will arrive so they will be there for you at the right time. We will update them with any changes in real time. I can usually get an exact departure time from the tracker...but we will need your ETA on inReach once you are in the air.*

MYSELF: *Understood, will keep you posted. I am already getting excited about reaching India. By the way, my hometown in India is Ambala. So, I would like to land at Ambala, an air force field, if possible.*

AHMED: *Ravi, for using military fields in India we need to apply at least 15 days before. Can you confirm your full route and dates in India so we can start working on it now?*

MYSELF: *Ahmed, this is my tentative schedule for India: Muscat-Ahmedabad July 18th. Ahmedabad-Ambala July 21st. Ambala-Kolkata July 27th Kolkata-U-Tapao July 28th. Let me know if you need anything else from me.*

AHMED: *Got it! I will work on it straight away and by the way I remember you mentioned you had a multiple entry India visa. Can you send us a photo of that? It's not urgent, just when you have time. All other info I need is already in hand.*

MYSELF: *Ahmed, I will scan and send the India visa tomorrow!*

AHMED: *That's all we need.*

EDDIE: *Ahmed, add the history and reason for going to Ambala, Especially seeing that charity is involved with the local hospital, it might help move things along.*

I had left Saint-Honoré to fly to Iqaluit, a distance of 905 NM, just about the maximum range of my plane in 20 NM headwinds. After nearing Kuujjuak, the last airport with Avgas before heading onto 250 NM of Hudson Bay waters filled with thousands of icebergs, I decided to stop there to make a fuel stop. Little did I know, Avgas was sold in barrels there. I was handed over the barrel at the storage shed and told to go for it. No tools, no pump.



Refueling the plane at Kuujjuak, Greenland

After standing around, having no idea how to proceed for several minutes, the fuel man noticed that I was confounded. He agreed to help me roll the 300lb barrel to my plane and jury-rigged some tools to open the barrel. I carried a very small 12 V pump for

emergency use but had no battery to run it for long. Fortunately, the fuel man was able to bring his pickup truck to the airplane. I used his cigarette lighter port to connect the pump and transfer gas from the barrel to the plane. It took over an hour. The cost of that barrel of gas was \$615; I normally pay \$200. It was a real ordeal and pricey to take that gas, and I probably would have made it to Iqaluit without it. But I was glad I got it. I'd rather err on the side of safety.

With all the issues I had fueling the plane, I ended up spending 4-5 hours on the ground in Kuujjuak. I had not planned to spend that much time and had not informed Eddie. After not seeing me on the tracker for so long Eddie texted me:

EDDIE: *Hi Ravi, are you having problems at Kuujjuak?*

RAVI: *I stopped for fuel at Kuujjuak and am just departing now.*

EDDIE: *How is the weather? Confirm you will carry on to Iqaluit?*

MYSELF: *Yes, but I'm having a problem with my CHT. I'll get back to you later.*

Upon taking off from Kuujjuak, as soon as I got on top of Hudson Bay, my exhaust gas temperature (EGT) on Cylinder #4 suddenly went into the red. I had never experienced anything like that before. Strangely, the turbine inlet temperature (TIT) did not change. After a couple of minutes, the EGT dropped and then went back up again. I surmised that it was a problem with the probe or loose wiring since the fluctuations were fairly rapid. There were never indications of anything else wrong with the EGT. I carried on, but I was concerned enough to text to Doug, my mechanic in Binghamton, NY:

MYSELF: *Doug, I just took off from Kuujjuak. On take-off, my cylinder 4 temp was fluctuating and got into the red. I think it was up to 460. Now it's at 364. But the EGT is fluctuating up to 1600. What is wrong?*

DOUG: *If it is fluctuating it is probably the probe. How is the engine running, how is the TIT?*

MYSELF: *WOW, now EGT fluctuating all the time up and down up to 1800 degrees.*

DOUG: *It's because you are flying over water.*

This was a joke between Doug and me – that the scariest things always happened when you flew over water, and there was no chance of making an emergency landing.

MYSELF: *I think so too! It is going up and down all the time. But the cylinder head temperature (CHT) now seems stable at 366.*

DOUG: *Which was fluctuating, EGT or CHT?*

MYSELF: *The EGT was going crazy. CHT is now stable at 388. I think it is connections as CHT only on cylinder #4 scared me on take-off, I knew I could barely make it to Iqaluit so I landed for gas at Kuujjuak. They had barrels only, not even a tool to open it! A barrel cost me \$615! I had to roll the barrel to the plane and use a 12 V pump! The whole thing took 50 minutes.*

DOUG: *If you buy gas like that and see temp issues on all cylinders immediately after takeoff, land as soon as possible. You could have bad gas. I'm sure quality control on a barrel is not the same as on a fuel truck.*

MYSELF: *Bad gas would be all cylinders, not one only! I can't land. All seems OK except #4 is still fluctuating.*

DOUG: *Yes. You would see it on all cylinders. I just wanted to pass that along.*

MYSELF: *Can only one cylinder go bad for any reason?*

DOUG: *Yes, but you would see it in the EGT also. What are 2 and 6?*

MYSELF: *Cylinder #2 is 306, #6 is 338. At 50% power, no fluctuations. EGT 1540 and #4 is 378. What do you suggest?*

DOUG: *I think it's the probe. Keep me posted.*

MYSELF: *I will carry on.*

DOUG: *When you land you can download the data and share it with me. I still think it is just the EGT probe. If it continues to act up I will get one to you in Europe.*

EDDIE: *watching my flight track on a Canadian map and seeing all the lakes on the map, then texted:*

EDDIE: *I wouldn't bother trying to count the lakes there...there must be thousands!*

MYSELF: *Too many icebergs too! It is gorgeous, though!*

The ability to text back and forth live during my flight was extremely useful and also very fun. I felt like an astronaut heading to the moon in conversation with Houston Control!

Later, Pratibha texted me to let me know that there had been extensive coverage of my departure from Buffalo on the local news channel. She sent me the link where I could watch it after landing. I was excited to learn about the positive media coverage and forwarded the link to Eddie so he could also watch it on the website.

I arrived safely in Iqaluit, only one day after beginning my RTW. The following day I would start my first leg of flight over the North Atlantic, considered to be the most adventurous part of a RTW flight. The refueling at Kuujjuak was a learning experience, but the high CHT temperature fluctuations I experienced were serious and could have derailed my RTW. Thinking about what else could happen during the flight over the North Atlantic worried me a lot, but the fact that I was able to handle the temperature issues without panicking gave me the confidence to carry on. I tried to relax and get a good night's sleep. In the morning, I turned my computer on to check for Eddie's messages:

EDDIE: *Good morning Ravi, can you check in with us when you are ready, please?*

MYSELF: *I will be leaving in about 1.5 hour.*

EDDIE: *Did you get any photos from yesterday?*

MYSELF: *I had a lot of icing and a wayward probe on cylinder #4. I also lost my GPS signal for a while. So I was busy. No pictures. But I will get some today!*

Flying over the North Atlantic to the Lands of the Midnight Sun: Nuuk, Greenland

This segment of the RTW was going to be my first flight over the North Atlantic; I was aware that radar coverage is lacking there and ATC relies on position reports for traffic control. Pilots must file detailed flight plans that follow international airways with reporting points that are approximately 50 NM apart. During flight, pilots must report their time of arrival at each reporting point and the estimated arrival time at the next reporting point. Also, due to the lower altitudes levels in which General Aviation planes like mine fly, radio communication with ATC can be difficult at times. Pilots in such situations often need to relay position reports through airline pilots that are flying in the area at a much higher altitude, or use a satellite phone.

Other important factors to consider while planning the flight over the North Atlantic: You need to plan for cold temperatures with high winds up to 150 NM an hour. Wind direction and weather can change unexpectedly at any time. Alternate airports, especially in an extremely low population density country like Greenland, are often too far (200-300 NM) apart. If, upon arrival at the destination airport, landing is not possible due to weather, the airplane must have enough reserve fuel to reach an alternate airport.



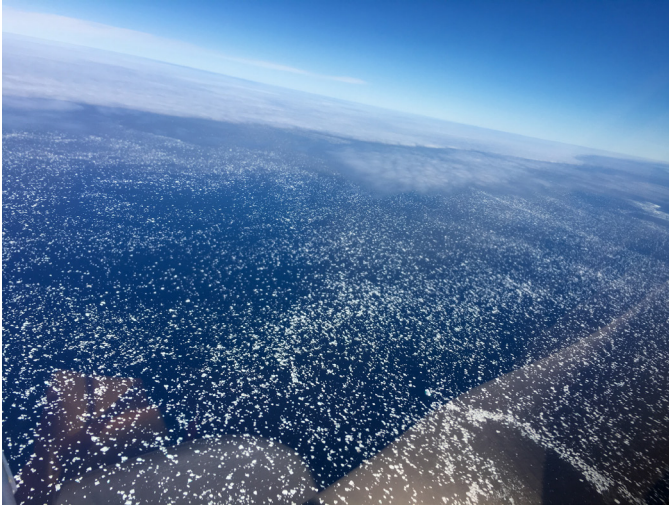
With survival suit on, ready to take off for Nuuk

After carefully planning for all possibilities, I put on my cold water survival suit and got ready for take-off from Iqaluit. With the survival suit on and the door closed, I felt very hot. By the time I'd taxied to the fuel station and fueled up, I started to sweat. After paying \$615 the previous day, getting a barrel for \$315 here felt like a bargain, and this even included pumping it into my plane. To make sure I didn't get dehydrated while flying, I drank a couple of bottles of water, got my clearance, and departed Iqaluit.

Crossing the Labradorian coast, I was able to watch glaciers calving icebergs into the ocean – an amazing sight. Soon my troubles began, however. I had not thought of the implications of drinking too much water at the time, but because of my enlarged prostate, I had my first human factor emergency only 20 minutes into my flight. I had an extreme urge to pee. The suit I wore was bulky, and the zippers were very tight. I was jammed in the pilot seat in a very small cockpit with not much space to move around! So, the challenge was to somehow find a way to open the zipper and connect with the portable pee bottle I was carrying or pee in my pants. Of course, I found a way. I never knew how good a contortionist I can be in a real emergency! Needless to say, I would carefully plan for all human factors that I might have to deal with, for my age and medical conditions during the rest of my RTW flight.

After taking care of nature's call, I was just beginning to feel relaxed and comfortable when suddenly a warning message came on my GPS screen: No GPS signal, use dead reckoning. I had no idea what dead reckoning meant! I probably had read about it during my IFR training, years before, but now I could not recall it at all. With the loss of my GPS signal, I lost my situational awareness; I had no idea where I was or which direction I was heading. Using a magnetic compass to navigate, with all of its associated magnetic variation errors at that latitude, was beyond my capability. It really scared me. The ocean down below was packed with millions of icebergs. There was no place even to ditch safely. I questioned if it was even worth wearing the survival suit at all. As I contemplated my options in a panic, the GPS signal suddenly came back, and all became normal again.

A few minutes later, I lost the signal again, but this time I stayed calm as I believed that it would come back. It did! This happened several more times. Losing my GPS signal so many times really unnerved me. After a few times, I was beginning to question if the GPS signal was even reliable anymore and I was really at the location it was showing me. The Greenland shores were still two hours flight away; I could not wait to reach them.



Iceberg filled waters of the North Atlantic

Finally, the GPS showed me to be only five miles away from the Nuuk airport. I descended through broken clouds and light icing and arrived on the Greenland shores with picture-perfect weather: a calm wind and blue skies. All I could see were snow-covered peaks and no sign of the Nuuk city or the airport. Shit, maybe my GPS is really not working properly, I thought. But as an IFR trained pilot, I ignored my hunches and trusted my instruments. Sure enough, a small runway by the side of a mountain came in view. Farther down, I could see some houses on the cliffs by the coast; it looked like a small fishing village. It turned out to be Nuuk. With a population of only 5000, it is the capital and the largest city in Greenland. It was almost funny to think of this little runway being the largest international airport in the capital city of the country of Greenland!

I had just completed my first leg of crossing the North Atlantic. Nuuk looked like paradise, an amazingly beautiful place in the land of the midnight sun. Words fail me, but to be in 24 hours of daylight was surreal.

I would later learn that, due to the unique characteristics of the earth's ionosphere at high latitudes, it is not uncommon to lose your GPS signal temporarily during solar winds/activity. Also, dead reckoning only meant continuing to proceed in the direction you were flying and to calculate your location by simply multiplying the time flown and the speed of the plane.

The Good Turns Ugly!

Rain was in the forecast the following day, with the weather predicted to improve again the day after. I decided to call off my scheduled flight and to enjoy another day in the land of the midnight sun!

Unfortunately for me, the weather in Nuuk can be very unpredictable. After I postponed my plans to fly to Iceland, I sat near my hotel room window and watched bright sunshine all day. I had to keep reminding myself of the pilot's number one mantra: "It is better to be on the ground and wishing you were up there, then to be up there and wishing you were on the ground."

The following day, the forecast called for good weather, but that didn't come to fruition. I ended up sitting in the control tower for three hours (The air traffic controller was nice enough to invite me up) waiting for the snow and then the rain to stop, and the morning fog to lift. All the while, the Air Greenland planes kept taking off in almost zero ceiling with less than 400 meters of visibility. Air Greenland really does have brave pilots! When it comes to flying, compared to them, I am a coward!

When it finally became clear that there was no chance of the weather changing, I canceled my flight plan yet again and headed back to my hotel. After two days in Nuuk, I was hoping to be on my way to Iceland the following day.



Hanging out with ATC in Nuuk, Greenland

Even while stuck on the ground in Greenland, I remained in close contact with Eddie and Ahmed:

AHMED: *“Hi Ravi, I hope you enjoy your rest day! I just wanted to cover a couple of points ... can we have a schedule with ETDs / ETAs for the next 7 days? A tentative schedule is okay, but something close to what will actually happen. The reason I am asking is that some countries have a required lead time for applying for permits. For example, Saudi Arabia has a strict 72 hours, and some airports are strict with slots, like Greece. If they don't have available slots, they will turn your request down and will refuse to let you use the airport (especially busy airports like Crete). As a reminder, some permits come with a 72 hour window and others are only good for the day of the flight. Any permit can be delayed, but a permit CANNOT be brought forward. So, a permit obtained for the 10th can be used on the 11th, but can't be used on 9th. Finally, note that some CAAs (Civil Aviation Authorities) are closed during weekends as well as national / public holidays, or have shorter working hours.*

While Ahmed focused on logistics, Eddie and I chatted about some of the other details:

EDDIE: *Hi Ravi, are you there?*

MYSELF: *Yes. I leave tomorrow morning for Reykjavik!*

EDDIE: *I hope you are enjoying Greenland. Our other RTW that is planning on crossing the Atlantic next week (westwards) has asked me to ask you where you are getting your weather reports from...I already told him about your onboard avionics.*

MYSELF: *I am using wunderground.com and windytv.com, I feel windytv.com is the best weather forecast tool for flying ever!*

EDDIE: *Yeah, I agree, we use windytv.com too! I will pass this on. Is there a revised schedule for tomorrow with ETD/ETA?*

MYSELF: *I plan to leave at 10:00 UTC. I'll email you the flight plan.*

EDDIE: *Brilliant. Your handlers are called ACE...they're the best there is!*

EDDIE and Ahmad were based in Cairo, Egypt. I thought of stopping in Cairo to meet them and asked:

MYSELF: *"What airports in Cairo can I use?"*

EDDIE: *There are two Cairo airports, Cairo International and October airport ...Cairo International is an entry airport but does not have Avgas – October airport is an Avgas airport but does not have entry. Usually, Avgas aircraft make their entry at Cairo International then proceed on to October airport where we have a hangar. Then they depart via another exit airport...*

Finding it a bit complicated, I decided not to meet Eddie and Ahmed in person on this trip.

MYSELF: *Sounds too cumbersome. I will stick with my original plan and visit Egypt some other time.*

EDDIE: *OK, understood... I am returning to the UK for good in November so it would have been good to meet up with you this time. It's a shame you won't get to meet my camel (in my profile pic), he is a sweetie...and I won't be taking him back to the UK.*

MYSELF: *I'm scared of camels. Long ago I almost fell off of one when it was getting up!*

EDDIE: *You would love mine...he likes to kiss our pilots.*

MYSELF: *Sorry to have to miss that!*

EDDIE: *Never mind, there will be plenty of adventures to come and I am sure you will get some ‘interesting’ memories to last you forever! Here’s the day I bought my camel:*



Eddie Gould and his camel, Charlie Brown

MYSELF: *WOW. That is gorgeous!*

EDDIE: *My camel, Charlie Brown, has been meeting, kissing, and giving rides to all our visiting pilots since 2013. Last year the actual previous owner hit hard times (no tourists coming to Egypt) and he needed money to cover medical costs for an operation and I was told he intended to sell Charlie to the butcher...I couldn't have that, so I stepped in and bought him for \$2,900. I have donated him to our great friend at the Pyramids who is a big supporter of GASE and looks after our visitors. He used to have a camel years ago but lost him and since then had to work as a helper for the owner of Charlie... so when I bought him I gave him to our friend so he could now get back to proper work. As well, I know he loves Charlie as much as we do.*

MYSELF: *That is really very kind of you. I appreciate that!*

EDDIE: *I am a softy when it comes to animals.*

Then, it was back to business.

MYSELF: *Is there Avgas at Reykjavik?*

EDDIE: *Yes.*

MYSELF: *Good, thanks. My database said no!*

EDDIE: *Weird...but not unusual...some databases have loads of wrong info...but we had an Avgas burner fly through there last week with no problem.*

MYSELF: *Raining here. Will delay departure by two hours. Now departing Nuuk at 12:00 UTC!*

EDDIE: *copied...let us know if this changes.*

Later, Eddie checked in again:

EDDIE: *Hi Ravi, any news on departure?*

MYSELF: *Weather now zero ceiling, 200 meter visibility! No chance of improving. Will go tomorrow!*

EDDIE: *I thought that would be the outcome. We were in contact with the airport and the longer you were on the ground the bigger the chance of you cancelling today's flight...OK, we will sort Iceland out...are you OK to return to the same hotel?*

MYSELF: *Yes, I am back at the hotel!*

But then Eddie wrote with an additional concern:

EDDIE: *I think we may have a problem...Greenland airports close on Sundays...did you talk to the people at the airfield about tomorrow's departure?. There will be a \$1200 fee for opening the airport for you to depart.*

MYSELF: *Yes, I did. I went up to the control tower and sat there for two hours chatting with the controller. He is a friend now and will let me depart tomorrow and not charge anything!*

EDDIE: *Brilliant...you have a silver tongue!*

MYSELF: *Not sure about that, but I definitely can panhandle!*

We were in communication again the following day:

EDDIE: *Good morning Ravi, how is it looking for today? Tracker started up so you may be flying? You are with me*

today as Ahmed is off duty for now. Can you confirm your plans...dep? ETA?

MYSELF: *ETA 15:50. Airborne already*

EDDIE: *Thank you. I have watched you on tracker since you turned it on. I will send movement report (MVT) to Reykjavik now. Did you end up paying for Sunday departure from Nuuk?*

MYSELF: *No, they waived it because they thought I am a nice guy!*

EDDIE: *You will have to be co-pilot for all our other Greenland flights! We could then advertise free Sunday departures!*

MYSELF: *One thing I've learned while traveling the world for business, people are nice everywhere. If you are nice to them they will reciprocate!*

EDDIE: *Ha! You haven't met the airport officials in Muscat then...*

MYSELF: *I am sure they will be nice, too. I've never had any problem in the Middle East! Not in Iran, either!*

EDDIE: *Iran is good but we always try to dissuade using Oman because of their attitude at the airport. Leaving pilots in their aircraft for hours under the sun. Going to make coffee...have tracker with me, so will be watching. Enjoy!*

MYSELF: *WOW, my ground speed right now is 230 NM an hour!*

EDDIE: *Time to wave goodbye to North America...*

MYSELF: *Yup, it was great!*

EDDIE: *Magnificent scenery in Greenland...especially if you saw the glaciers entering the ocean.*

MYSELF: *Yes, I did. It is perfectly clear weather!*

The Greenland Ice Sheet

On my way from Nuuk to Reykjavik, I flew over the miles-deep ice sheet of Greenland, one of the greatest natural wonders on Earth. Ninety-seven percent of climate scientists agree that global climate-warming trends over the past century, extremely likely

due to human activities, are shrinking the Greenland ice sheet, and satellite monitoring has revealed that 70% of Greenland's contributions to sea level rise has come not from ice but meltwater.

The Intergovernmental Panel on Climate Change (IPCC) projects that the Earth will warm by two to six degrees Fahrenheit and that sea levels will rise by six inches to three feet by the year 2100. The possible US impacts of a 19 inch rise in sea level (IPCC's best estimate for 2100) include: 10,000 acres of coastal upland property lost in Massachusetts; Chesapeake Bay marsh islands severely reduced; more than 100 feet of erosion on most US beaches; almost 800 square miles of dry land lost in Florida.

As a scientist myself, I firmly believe in Climate Change. I was looking forward to flying over the Greenland ice sheet as it offered me the rare opportunity to see and confirm the signs of global warming firsthand. Seeing it melting in places, I could not help but think that Mr. Trump, our president, better start listening to the scientists and help them keep it frozen as it is meant to be, or he soon will be watching his beloved Mar-a-Lago mansion (literally located in a coastal zone of Florida) float away into the sea!



The Greenland ice sheet melting, as seen from the air

Lava Fields, Hot Springs, and Geysers, Iceland

I spent the day walking around Reykjavik. Later, I took the Golden Circle bus tour. I saw lava fields, hot springs, geysers, active

volcanoes, shrinking glaciers, and North America-Eurasia tectonic plates tearing apart - it was all there to see. Iceland is a geological wonder of nature! What else can I say? It was simply a gorgeous place to visit.



North America-Eurasia tectonic plates tearing apart

The people of Iceland are proud people; they even built a museum wholly dedicated to their penises (The Icelandic Phallological Museum). I am not kidding! It is the only museum of its kind in the world.

After enjoying such delights, I had to come back to reality. I needed to focus on my longest ever flight over water the following day: Reykjavik to Liverpool (900 NM)!

Also, Eddie had earlier asked me to let him know of my plan after Liverpool, once finalized. So, before calling it off for the day, I texted:

MYSELF: *Hi Eddie, I have some other changes in my flight plan: My fellow Rotarian and pilot friend in Bologna, Italy has been able to arrange a fund raising event with the Rotarians and some press coverage in Bologna for me. So, I will fly from Liverpool to Bologna on Thursday the 13th. I need to get custom clearance there and then go to Guglielmo-Zamboni (10*

miles away), where he has arranged for the press to come. He is based at Guglielmo-Zamboni and will also help me change my oil there. I plan to fly from Guglielmo-Zamboni to Crete on the 15th. I think I already sent that schedule to Ahmed earlier. Please let me know if you have any questions or comments. Thanks!

EDDIE: *Hi Ravi, copied on that.*



Back in 1977, neither I nor any of my friends had ever heard of Tonawanda. Those were pre-internet days, so we looked it up in an atlas and learned that Tonawanda was a suburb of Buffalo. After reading about Buffalo, all my friends advised me not to go there. Buffalo was known to be a very cold, windy, and snowy city with a famous waterfall (Niagara Falls). I assumed that it must be a mountainous city. In India, snowfall and waterfalls only occur in the Himalayan Mountains.

Until now, I only had an F-1 student visa. Very few companies were willing to take a chance on employing international students as there was no guarantee they would establish permanent residency, and since this was the only job offer I had, I decided to take it and move to Buffalo. I was to start working at Linde on February 1st, so I booked a flight from Atlanta to Buffalo for January 28th.

From January 28th to February 1st, 1977, Buffalo experienced the infamous Blizzard of '77. Daily peak wind gusts ranging from 46 to 69 mph were recorded by the National Weather Service in Buffalo, with snowfall as high as 100 inches, which the high winds blew into snowdrifts of 30 to 40 feet. There were 23 total storm-related deaths in western New York, with five more in northern New York.

An estimated 10,000 cars were stranded on the streets in the city of Buffalo. Dump trucks and payloaders dumped snow into the Niagara River.

On Saturday, blizzard conditions prevailed. The *Buffalo Courier-Express* did not publish for the first time in its 143-year history and The *Buffalo Evening News* published only 10,000 copies. President Jimmy Carter declared an emergency for western New York.



Snow-covered Buffalo streets - Blizzard of '77



Houses buried in snowdrifts - Blizzard of '77

Due to the storm, my flight on the 28th of January was cancelled. I was rebooked on the first available flight once the airport opened on the 30th. I arrived in Buffalo, which was to be my home for the next more than 40 years, in the middle of this storm. Contrary to my imagination of Buffalo being mountainous, it is flat. I had never seen so much snow. It was funny to think that back in 1972; I had arrived in Arizona, the hottest place in USA, wearing woolen clothes and carrying a blanket and now in Buffalo, one of the coldest places, without any warm clothes! The first order of business was to buy a winter jacket. With the jacket on, I could not

wait to go to Niagara Falls just to see how a waterfall could exist in such a flat place!

I enjoyed working at Linde and my managers liked my work. However, over the years, changes were implemented in my department that I did not agree with. Finding me rebellious in conforming to the corporate culture at Linde, my manager ultimately asked me to leave.

By that time, I had acquired permanent resident status, and with four years of research experience at a very reputed firm, I was confident of getting job offers from many large companies anywhere in the United States. I wanted to move from Buffalo; however, my wife, who was an anesthesia resident at the State University of New York (SUNY) Buffalo still had a year and a half left to complete her residency program. With the thought of staying in Buffalo for just another year and a half, I accepted an engineering position in 1981 at a small Buffalo-based division (XORBOX) of Omnicare, a company with headquarters in Cincinnati. I would have never considered working for such a small company without assuming that I was going to be there for only a year and a half.

Because XORBOX was not stymied with the burden of a large corporate structure, I had a lot of freedom in how we did the work. My work was not limited to just Research & Development, and I had the opportunity to be involved in every aspect of the business. I enjoyed working there and decided to stay in Buffalo. I learned a lot about business in general at XORBOX and did well enough that, within four years, I was promoted to become the president of the company.

I worked extremely hard, and XORBOX started to grow at a pace that the company had not foreseen or expected. In the eyes of the corporate headquarters in Cincinnati, however, I still operated as an engineer. With the potential for continued substantial growth for XORBOX, the management in Cincinnati decided they wanted someone with a business background to run it. As a result, they promoted my subordinate, Joe Priest, over me. I fought back but was fired in December of 1986. Joe Priest was a young, hard-working, brilliant man with an MBA from the Wharton School of Business,

then considered to be the best business school in the world. Joe saw that I was being wronged and he refused to take over. Instead, with encouragement by Norm McCombs, a mutual friend of ours, Joe decided to leave XORBOX and join me in starting a competing business. Thus, in January 1987, Joe, Ed Vrana (another colleague of ours), and I started AirSep Corporation. Our new company did well and, over time, AirSep not only acquired XORBOX, but became the largest manufacturer of oxygen concentrators for home respiratory therapy in the world!

Little did I know that taking up the job with XORBOX would turn out to be one of the most impactful decisions of my life. Without it, I would have never learned as much about how businesses work. I would have probably retired just as an R&D engineer in some large company somewhere in the United States. Instead, working and getting fired at XORBOX resulted in me becoming a successful entrepreneur, which created the financial resources I needed to continue pursuing my passion for flying.

8

SCOTLAND - ENGLAND - ITALY - GREECE

Getting by with a Little Help from My Friends

For a flight around the world to continue smoothly, it is vital that, while flying the current leg, the logistics of the next two legs be worked out. It requires constant communication and coordination between the pilot and logistics support.

The night before I left Iceland for the United Kingdom, I went back to my hotel and connected to the internet to communicate with GASE:

EDDIE: *Confirm tomorrow's fly to Faroe Islands...one night?*

MYSELF: *No, I want to go direct to Liverpool tomorrow. I think I can make it. If I feel I can't due to winds I will divert to Wick! I sent my flight plan to you before. If you have not received, I can send again.*

I had now completed two international legs of my flight over the North Atlantic and had learned one important thing: Flights outside of the USA are very structured. One must file detailed flight plans and route selection must strictly follow international airways.

A good flight planning software like SkyVector can help pilots with such tasks, but having done most of my flying in the United

States, I had not used that kind of software. I was having difficulty in correctly filing my flight plans.

EDDIE: *Let's run through the plans...Reykjavik to Wick with Faroe Island as alternate...correct? Then onto Liverpool the same day?*

MYSELF: *Yes, I need to get to Liverpool tomorrow! My flight plan got rejected. Do you have flight plan I can use? I have difficulty using EuroFPL.*

The flight plan Eddie gave me to try did not work due to non-compliance with the standard instrument departure procedure. Eddie then suggested that I get Andy at Wick to help me file from there. I told him that I was thinking the same thing and will worry about it after reaching Wick. I was just too tired and needed to get some sleep!

The following morning, I heard from Eddie bright and early:

EDDIE: *Good morning Ravi are you there? Here is reply from Andy at Wick: "Morning Eddie, All arranged for this flight and I can sort a flight plan for Liverpool for him no problem."*

MYSELF: *Thanks, Eddie. I was all ruffled up last night, but I feel good now. All set for Wick!*

EDDIE: *We're waiting to hear from Liverpool now. The handlers there are called Liverpool Aviation Services LAS/Ravenair.*

MYSELF: *I am sure everything will be okay.*

EDDIE: *Ok, once you are airborne and ready to send a message, let me know your ETA for Wick so I can send the MVT to Andy. Cheers!*

MYSELF: *I'm starting my trip. Follow along at my MapShare site!*

EDDIE: *Now entering the North Atlantic...need ETA at Wick.*

MYSELF: *ETA 12:00 Wick.*

EDDIE: *Copied ETA, thank you... Here is your PNR number for Liverpool Liverpool: PNR No is GA/02/11/KD.*

MYSELF: *What is PNR?*

EDDIE: *It stands for 'Prior Notice Required' It's the number given to allow your arrival. You may be asked for it by ATC when on approach. But it only happens occasionally.*

MYSELF: *OK. Thanks for everything, Eddie. You have been great!*

EDDIE: *Welcome to Scotland!*

AT *Wick, after refueling, Andy helped me with a flight plan for Liverpool, and I departed for Liverpool.*

AHMED: *Hi Ravi, are you airborne and on the way to Liverpool? We have the euro control Flight Plan that gives an ETA of 1626Z...confirm?*

MYSELF: *Affirm.*

EDDIE: *Movement Report (MVT) sent to LAS at Liverpool. By the way, that's Loch Ness over to your starboard at 2 o' clock and can you see Blackpool tower? You almost flew over my old house by about half a kilometer. I'll catch up with you later. You will be busy now for arrival.*

Finally, I finished crossing the North Atlantic and breathed a huge sigh of relief!

Unbeknownst to me, Eddie had asked his friend Scott Timo to videotape my landing at Liverpool. I was surprised when, upon landing, Scott greeted me, told me he knew all about my charity flight, and gave me a copy of the video he made of my landing at Liverpool! Not only that, for being a charity flight, the handlers also waived their handling fee.

EDDIE: *Scott went looking for you upon your arrival...How did it go and did you get to where you wanted to be okay?*

MYSELF: *Everything worked out fantastic!*

EDDIE: *The weather in the photo and video he sent don't look that good.*

MYSELF: *Yeah, it was raining and the ceiling was low. I did an Instrument approach to Runway 27.*

EDDIE: *This is the airport I worked at when I left school...in 1970! That runway was only just built and I worked in the old airport that is mostly demolished now. Just the old terminal building from the 1930's is left standing as a heritage center and hotel. The company I worked for is still there, Keenair.*

MYSELF: *Eddie, both in Wick and Liverpool the people could not be nicer! I am so lucky to meet them.*

EDDIE: *Good to hear you have had good service in the UK. Hope you get a photo next to the Beatles statue!*

MYSELF: *Great, thanks. By the way, it is an absolutely gorgeous day in Liverpool!*

EDDIE: *Thanks for the Penny Lane photo.*

MYSELF: *Being a big Beatles fan, that was the first thing I wanted to do in Liverpool, go to Penny Lane!*

EDDIE: *What about Strawberry Fields and the Cavern in Matthew Street? And of course the Yellow Submarine at Albert Dock, if it's still there.*

After spending the day sightseeing in Liverpool, I posted the following blog on my website for my friends back home to see:

IMAGINE John Lennon, Liverpool

I landed at John Lennon Airport in Liverpool. As a lifelong Beatles fan, I can still hear Lennon singing to the world, "All you need is love, love. Love is all you need." So true!

It is the love for our fellow beings and "service above self" that makes this world a better place for all. But, friends, I am falling behind in achieving my goal. With 20% of my journey completed, I have not reached 20% of my goal to raise \$750,000.

As Lennon would probably sing: "Help me if you can I am falling behind. And I do appreciate you being around. Help me get my mission turned back around. Won't you please, please help me." I am counting on you, friends, to not fail me now. Please continue to donate.

I have crossed the deepest oceans, I am now ready to cross the highest mountains. My next stop is across the Alps: Bologna, Italy!



Visiting the statue of the Beatles in Liverpool , UK

I am not even going to depart Liverpool for Bologna for another day yet, but Ahmed is already busy sorting out the logistics of my next two legs of flight from Bologna.

AHMED: *Do you have a plan for Greece and until Bahrain with dates? Saudi Arabia and Bahrain permits need to be applied for at least 72 hours before the flight.*

MYSELF: *Yes, I want to go to Crete on the 15th then on 16th to Amman, on 17th to Bahrain and on 18th to Muscat. Of course, weather permitting. I do not have plans for a stop in Saudi Arabia!*

Ahmed tells me that even though I will not be stopping in Saudi Arabia, but I will still need overflying permission. He will arrange for it and then asked how many nights in Muscat and what's next? Ahmedabad? I let him know that some pilot had sent me an email that he is Muscat based and wants to meet me. So, depending on how we get on and how the place is, I may spend an extra day as I had never been to Muscat! From Muscat, I planned on flying to Ahmedabad.

AHMED: *Muscat is a slot coordinated airport and they are very strict with times in and out so we need to be specific when it comes to times (even for ETD / ETA) otherwise they put heavy penalties for non-compliance. Can you make a decision on your Muscat stop tomorrow?*

MYSELF: *OK. Let me think about it. Will be back.*

AHMED: *By the way, just to make sure you are aware of your route from Crete to Amman as it has a bit of a dog leg.*

MYSELF: *No, I was not aware. How long is the total trip?*

AHMED: *Based on 180 knots at FL170 it's four and a half hours. You will overfly Egypt then into Jordan.*

MYSELF: *That I can do! Hope to catch a tailwind, too!*

AHMED: *Hopefully.*

The following day, Eddie wrote:

EDDIE: *Hi Ravi, how are things...can you confirm or update today's plans...ETD and ETA please.*

MYSELF: *All is well. I'll depart Liverpool in 15 minutes. Will text when airborne.*

I departed Liverpool airport on the morning of July 13th and turned my tracker on:

MYSELF: *I'm starting my trip. Follow along at my MapShare site!*

EDDIE: *Great! There you are.*

SUDDENLY *my Cylinder 4 temperature began to rise and got past the safe limit and into the red zone.*

MYSELF: *Eddie, I'm now having some cylinder head temperature (CHT) issue with cylinder 4. Trying to sort it out with my mechanic. May not be able to reply to your messages fast!*

EDDIE: *OK, understood...I have to go to the pharmacy in a bit so I'll read any messages when I get back. In an emergency use ops mail.*

Worried about the rising CHT on cylinder 4, I texted my mechanic Doug Goodrich in Binghamton, NY. When he didn't reply, I sent the text again:

MYSELF: *Doug, did you get my message? My cylinder 4 temp is now 442!*

DOUG: *Is it fluctuating?*

MYSELF: *No, steady. But my exhaust gas temperature (EGT) is still fluctuating.*

DOUG: *Do you have the ability to send me a screenshot of the multifunction display (MFD)?*

MYSELF: *Not while flying. But my CHT is now 472. I had been flying at FL150 (15000FT.), I came down to FL 130 (13,000 feet) and it dropped a bit but it's still high. After coming down to FL 110 (11,000 ft), it is now 460.*

DOUG: *That's too high. We need to get that figured out.*

DOUG: *You need to find a place where you can get those probes swapped for troubleshooting. Then we will know if you just have a probe issue or a real issue with the cylinder.*

MYSELF: *Well I am over the English Channel now, heading to a service center in Bologna, but it is 3.5 hours away.*

We continued to try to sort the problem out, but by now, I had climbed to FL190 (19,000 ft) and was in the middle of the Alps Mountains.

DOUG: *What is your turbine inlet temperature (TIT)?*

MYSELF: *1630. CHT Temp had come down to 456 but now it's back up to 475-480. WOW 486 now. EGT is still fluctuating.*

DOUG: *I need the right and left TIT so I can compare them.*

MYSELF: *I only have left one on the MFD: 1635*

DOUG: *The right is an analog gauge. Try to read the right one as accurately as possible.*

MYSELF: *It seems to be about 1600 or maybe 1580. Cylinder 4 is on the left side and the left TIT is running hotter. Any idea?*

DOUG: *I can't advise any more until it's looked at.*

At this point, I knew that Doug was worried about his liability if he was on record advising me, and something dire happened. That meant I was in real danger. I had tried everything I could to get my engine temperatures out of the red. I'd changed power settings, altitude, air/fuel ratio, etc. I was hoping Doug will be able to help me out, but now he had deserted me.

All my temperature readings on Cylinder 4 were in the red. Sensors on this particular cylinder had given me problems earlier while taking off from Kuujuaq, but, during that episode, the temperature had been fluctuating rapidly, more rapidly than would be indicated in a real situation if the engine was overheating. This time was different; the temperature was high and steady. I had no idea what was going on, whether it was just the sensors or if there was really a serious problem with cylinder 4.

Ordinarily, in such a situation, I would make an emergency landing at the nearest airport and get things checked out, but I was flying over the Alps now. Mt. Blanc was only a few miles to my right. All I could see were snow-covered peaks all around, not a sliver of flat land for me to make even a crash landing. Bologna was still 250 miles away. So, though I was more scared than I'd ever been as a pilot, I had no other choice but to carry on.

I hoped the problem would turn out to only be a faulty sensor. However, I continued to try to find the cause of the problem.

MYSELF: *Don't advise me, but tell me what the indication of comparing L and R TIT is?*

DOUG: *Since we don't know what the 4 EGT is I am comparing the two TIT temps which are a cumulative temp on each side. #4 cylinder is the middle cylinder on the left side. You said the left TIT on the MFD is 1635 and the right TIT on the analog gauge is 1580 to 1600. It shows that the cumulative temp on the left is higher on the left than on the right. I can't see all your temps so it's impossible to tell. Max CHT is 460, I believe. You are probably seeing red on the MFD. Until you have someone swap probes to eliminate them as the source of the problem, I can't offer much more help. Columbia has piston service centers in Paris and Geneva. What is #4 CHT now?*

MYSELF: *It is now past its max 500. All else seems fine. Paris and Italy are not too much different in distance. I'm continuing on to Italy. I've arranged for service at Sirius service center.*

After another half hour of flying, just as I am just getting past the Alps, the Cylinder temperature starts to come down. I breathed a huge sigh of relief!

MYSELF: *Temp now 454. In yellow. I think the sensor is the problem! Now it's stable at 450. It was 500 for a long time. It has been dropping steadily. Now 448!*

DOUG: *I like those temperatures a lot better.*

MYSELF: *Me too. Now 440.*

DOUG: *What are number 2 and number 6 CHT?*

MYSELF: *328 and 364. As soon as I crossed the Alps, the temperature dropped suddenly to 408! All the while I was over the mountains it was in red at 464. Now it's 384.*

The past three hours in flight were my most stressful ever, but with the critical condition of the high cylinder temperature sorted out, I could finally relax and continue my communication with Eddie:

MYSELF: *Eddie, LAS waived handling charges!*

EDDIE: *Sorry Ravi, I took longer than I thought, but I'm back now. Great news about waiving fees at Liverpool! Is your CHT problem sorted?*

MYSELF: *The temp has come down to acceptable. I think it is the probe. I'll get checked out at Guglielmo-Zamboni.*

I ask Eddie for the weather report at Bologna airport. After sending me the weather, Eddie jokingly tells me;

EDDIE: *You can now follow the E35 Autostrada all the way to Bologna. (It is an IFR joke...IFR means I Follow Roads). Ravi you are almost there...will catch up with you later. Enjoy the pasta :-)*

After Bologna, I headed on to Guglielmo-Zamboni:

MYSELF: *I am heading to Guglielmo-Zamboni in 45 minutes.*

EDDIE: *are you there?*

MYSELF: *Yes, I made it there a bit later than planned! Sorry for not replying sooner. I went to a Rotary meeting right after landing, came back pretty late, and fell asleep!*

EDDIE: *No worries Ravi, it's a non flying day so you deserve a rest. Although I hear you are getting temperatures in Italy close to what we are having here...a big change from Iceland!*

Before departing Italy, I posted my blog:

The Incredible Bologna Rotarians!

After a great stay with my wonderful friends in Liverpool, Qutub, and Mubeen, I flew over France, Switzerland, and the breathtaking peaks and valleys of the Alps to Bologna, Italy. Giuseppe Berardo, a fellow International Fellowship of Flying Rotarians (IFFR) member, received me at the airport and drove me to the dinner meeting of Bologna Rotarians. My welcome by the Bologna Rotarians was simply incredible and elegant. Bologna TV then came out to the airport for an interview with me in the morning.

Bologna is also one of my planned service/maintenance stops for the trip. After getting the oil changed and a problematic temperature probe fixed, I test flew the airplane. All seemed fine and ready to go for tomorrow.



With Bologna Rotarians



With Giuseppe Berrardo at Guglielmo-Zamboni, Italy

The next stop was Crete, Greece. The following day I heard from my friends at GASE again, letting me know that I had a tight window in which to land at my next destination at Crete:

AHMED: *Hi Ravi, any news about the aircraft status?*

MYSELF: *All set. Will leave tomorrow for Crete at 8:00 UTC.*

AHMED: *Brilliant. Ravi, I need to give you a bit of a briefing regarding Crete: Recently there is a new regulation which requires compliance with airport slots, +/- 30 minutes., This means that you should land there not before 1230Z and not after 1330Z. Please ensure NOT to file the Flight Plan until you have PPR + Slot. We will be assigned a slot at 0600z.*

MYSELF: *Thanks!*

The following morning I wrote to confirm my slot:

MYSELF: *Do we have a PPR(permit number) & slot?*

EDDIE: *Yes, PPR number is LGIR13101407/15071300/16070800 and slot 13:30 Instead of 13:00 originally requested!*

MYSELF: *So, I have to get there between 13:00 and 14:00 UTC?*

EDDIE: *I don't know? I asked for clarification as we don't want you to arrive at the wrong time. If it is 1330 how does that work with your departure time?*

MYSELF: *Good. I am ready as always!*

EDDIE: *Did you see yourself speaking perfect Italian on the news interview?*

MYSELF: *I have no idea what they were saying. All I can hope for is that whatever they made me say was good!*

EDDIE: *The over-dubbing made it look like it was you speaking Italian...for all we know you could have been giving the football results!*

MYSELF: *I said goooooooooooooooooooooal !!*

Being a big soccer fan, Eddie understood my Italian soccer broadcaster joke; I could almost hear Eddie laughing from Egypt.

MYSELF: *I am planning to depart in 30 minutes.*

EDDIE: *What would be your arrival time if you departed in 30 minutes...which would be 0800Z dep from Guglielmo-Zamboni?*

MYSELF: *I expect 13:00 UTC, but it might be 12:30 UTC, I will wait another 15 minutes.*

EDDIE: *To me it looks like 1330Z arrival slot with an 0800Z dep slot to Amman.*

MYSELF: *Whatever! I will leave in 30 minutes.*

EDDIE: *OK, will you be able to slow down at all if getting there too early? The new owners of Greek Aviation, a private company are happy to fine the pants off you if you're early or late. I checked your slot at Crete is definitely 13:30*

MYSELF: *Don't worry. I am all set.*

I had gotten my plane serviced in Bologna, and everything seemed to be working fine, I was excited to carry on with my RTW. So, as soon as it was practical, after departing Guglielmo-Zamboni, I turned my tracker on and texted Doug, my mechanic in Binghamton, NY.

MYSELF: *I'm starting my trip. Follow along at my MapShare site!*

DOUG: *Did you swap probes and test fly it?*

MYSELF: *No swapping. They cleaned the spark plug, contacts, etc.*

DOUG: *Contacts? What do you mean?*

MYSELF: *They put in new leads, electrical connectors, and tested it on the ground, and then I test flew the plane. TV people were there interviewing me so I could not watch the mechanics working on my plane. So, don't really know exactly what they did. You can watch the Italian news video on my Facebook or website blog page. It shows a bit of what the mechanics were doing!*

DOUG: *So #4 EGT has stopped fluctuating?*

MYSELF: *All is perfect. Cylinder 4, CHT 358, EGT 1480. But I am flying at 40% power. I needed to slow down because of very strong tailwinds. I am not allowed to reach my destination before my allotted landing slot!*

I also kept in touch with Eddie during this flight:

MYSELF: *Hi Eddie, I'm starting my trip. Follow along at my MapShare site! Are you tracking now?*

EDDIE: *Yes. Your slot is for 13:30 You can arrive between 1300Z and 1400Z. Please confirm you've received this message, thank you.*

MYSELF: *Yes, I slowed down. Now my ETA is 12:45. I'm at 40% power. The tailwinds are too good! I'll change my flight plan to slow down a bit more.*

EDDIE: *Typical...tailwinds when you don't need them...Tracker isn't working but I've got you on FlightRadar 24. It has you coming up to the 'spur' of Italy that sticks out.*

MYSELF: *Good Thanks. Now my ETA is 12:50. I'll slow down when I descend near my destination. I'll make sure not to get there before 13:00!*

EDDIE: *I have you just passing a town called Rodi at 15,000ft doing 181knts.*

MYSELF: *Yes, my ETA is now 12:53.*

EDDIE: *I'll check the winds around where you turn east along the coast of Crete...-10 knot tailwind along the Crete coast at 10,000ft.*

MYSELF: *OK, I will be fine I am sure. My ETA is now 12:55. I've only got 5 more minutes to lose, so not bad at all...*

EDDIE: *You watch, they will put you in a hold for 30 minutes!*

MYSELF: *I hope not. I have never done a hold ever! I better look it up on my charts!*

EDDIE: *Sods law...one day you will be wishing for those tailwinds!*

MYSELF: *I know if I flew like this all the time, I would save thousands on my fuel bill alone! Crazy. I have never tried so hard to slow this bloody thing down! I will continue to try to slow down! ETA now 13:00. ETA now 13:10. Phew!*

EDDIE: *You are the man!*

Later that night I wrote to Eddie:

MYSELF: *Thanks, Eddie. I'm checked in at the hotel. All OK. I'm proud of my time management, I touched down at the numbers 13:30 UTC!*

EDDIE: *Yes, I saw...unbelievable! Better than an airline schedule!*



Growing up in India, I had only ever traveled by bus or train. Before I bought my Suzuki 120 in Tempe, AZ, in 1977, I had never ridden in a car or motorbike. Riding that motorbike was thrilling. I would ride it as fast as it would go. It served my risky instincts perfectly. The Suzuki was light, and I could handle it easily. I even learned to do a few tricks on it. When I left for Georgia, I gave it away to an Indian student who had just arrived at ASU from India.

After finishing my studies at Georgia Tech, I joined Linde on Feb 1, 1977, as a staff engineer in R&D. Frank Notaro, the R&D manager, assigned me to the Components Development group. This group

primarily worked on developing heat transfer components for Air Separation plants. Along with me, Linde had hired several other young engineers and technicians in that group. I was one of the younger engineers amongst them. All of us younger employees hung out regularly together. One of my good friends from this group was Tony Barone. He was a motorbike enthusiast who rode his motorbike to work. Talking to him about motorbikes brought back fond memories of my Suzuki days in Arizona. I told Tony how much fun I'd had when I'd owned a motorbike and what a great motorbike rider I was.

He said, "How about you buy a motorbike and we go riding together?" The very next day, I saw an ad for a used Honda 360 for sale. I went to see it and immediately bought it. But my Arizona motorbike license was not valid in New York, and I needed to take a motorbike check ride to get a license. I called the motor vehicle bureau and set up the earliest appointment I could get for the check ride. It was only a couple of days later.

Since I had to use my own motorbike for the test, I asked Tony to take me on my motorbike to the check ride site. Before taking me for the check ride, Tony suggested that I ride that motorbike in the parking lot to practice, since I had to perform perfectly on the check ride to get my New York license. I told Tony not to worry and jokingly bragged, "I am the hottest motorbike rider you'll ever see!" After we reached the check ride site, the inspector asked me to ride the motorbike around the street reserved for such tests. I rode the bike while Tony and the inspector watched. Because of my conversation with Tony on our way to the test, I wanted to show off a bit. I must have overdone it because the inspector flunked me for being reckless! He told me I needed to learn to ride the bike in the right way and to come back for another test after thirty days. The inspector got busy with other test-takers while I walked over to Tony feeling very embarrassed. He was sympathetic but could not keep himself from breaking into laughter.

Thirty days later, I went back to the test site again with Tony. A different inspector asked me to ride while he watched. I was determined to pass this time and tried to do everything by the book. I went slowly around the route the inspector indicated, and,

in my mind, I had done everything perfectly, but the inspector still flunked me. He told me I was not confident enough on the bike yet and needed to practice more and come back for the test again in another thirty days.

Tony took me back to work, and when we got there, he told all our friends what had just happened. They all laughed. For the next thirty days, I was the butt of all their jokes.

After another thirty days, I went back to the test site with Tony, and again there was a different inspector. The first thing he asked was for me to show him my motorbike registration. When I gave it to him, he noticed that the registration had just expired. I had not even bothered to look at it! He declined to give me the check ride and asked me to renew the registration and then return in thirty days for the check ride.

I was extremely disappointed, embarrassed, and frustrated, but there was nothing I could do. I said to myself, screw the license, summer is almost over! I will ride the motorbike without my license for the next couple of weeks before the weather became too cold to ride. I decided to worry about the registration the following year when good weather rolled around again.

The next day happened to be Saturday, so I called a friend of mine who lived about fifteen miles away, and told her I would come to pick her up and take her riding. I got on I-90, but after riding for 10-12 miles, the motorbike engine started to sputter and quit. The motorbike was used, and I had purchased it on a whim without having it thoroughly checked out. I had no idea why the engine quit, but I did not want to park on the emergency lane to wait for help. I had no license, no registration, and was afraid that a police car might stop to help and I might end up getting arrested!

I kept trying to restart the engine until the battery was too weak to crank. I tried to kick start it until I could not kick crank it anymore, and still, it did not start. I was very near the Exit 54 ramp, so I pushed my motorbike onto the ramp and tried to run-start it one last time. I disengaged the clutch and ran while pushing the motorbike along to get some speed. I engaged the clutch and tried

to jump on the motorbike as the engine sputtered as if it was going to start. I jumped on it with the motor running, but I couldn't handle the jerky start, and the motorbike fell on top of me. I was hurt but not too badly. Cars stopped to help, but I waved them on, telling them I was okay. I did not want to take a chance on drawing the attention of a police cruiser. Finally, I pushed the motorbike to the side and ran all the way to my friends' place, which by that time was less than a mile away. My friend was shocked when I arrived at her place, all scratched up and bleeding, but after hearing what had happened, she was relieved that I was okay. We called a tow truck and got the motorbike towed and fixed.

In India, boys who could afford motorbikes were considered hot. Girls swooned over them. So, when Pratibha came to the United States, she was excited that I had a motorbike. We enjoyed riding our motorbike around together. We had a three-car garage at that time, but we needed to park two cars and also reserve a space for our babysitter's car. Since there was no space left to park my motorbike, I would park my motorbike horizontally in front of Pratibha's car. One day after she had worked on a very tough case for many long hours at the hospital, she came home very tired and consumed by thoughts about the patient. Being so preoccupied, when she went to park her car in the garage, she pressed the accelerator instead of the breaks and rammed my motorbike into the garage drywall, making it look like a wall-mounted work of art, and thereby ending my motorbike days!

DISASTER AVERTED

July 25th Continued

It was during my flight over the Mediterranean Sea on that hot July day that a sputtering engine nearly ended my journey. I had checked all the logical and prevalent causes, but the engine still threatened to quit. While contemplating what to do next, I put on the Pulse Oximeter on my finger and was shocked to see that my oxygen saturation level had fallen to 70%. I found that I had forgotten to turn the main oxygen supply valve on. I turned that on and, within minutes, my oxygen level returned to a normal 96%. I felt better. It probably helped me to think rationally again, as I thought of the possibility of vapor lock in the fuel line. Vapor lock occurs when the liquid fuel changes state from liquid to gas while still in the fuel delivery system. This disrupts the operation of the fuel pump, causing loss of feed pressure to the carburetor or fuel injection system and resulting in transient loss of power or complete stalling. Restarting the engine from this state may be difficult.

Normally, while in flight, enough air flows around the fuel delivery system to keep it cool. Sometimes, the fuel can vaporize due to being heated by the engine, by the local climate, or due to a lower boiling point at high altitude. This is especially the case if the engine is running for a long time while standing on the ground on hot days. All of these conditions occurred in my case!

I turned the vapor suppression switch on, and the engine began to operate normally again. Phew, I heaved a sigh of relief! Before this flight, I had never had to use vapor suppression except when changing fuel tanks. As the engine returned to normal, I certainly believed God was watching over me.

I had departed Crete in a hurry and had only loaded the first two reporting points in my GPS plan. I was going to load the rest after I got to the assigned altitude, finished setting the engine power and started cruising. However, when I tried to load the rest of my flight plan, my Garmin 430 GPS would not accept it. It was confusing to me. I tried several times in vain. Fortunately, before starting my RTW, I had loaded all the world Nav Data in my Garmin 796, backup GPS. So, I turned my backup GPS on and completed the flight from Crete to Amman without any problem.

Upon landing, I checked and found out that the reason my Garmin 430's were not accepting my plan was that I was at the transition point of Nav-data. I was still using trans-Atlantic data. I should have loaded International Nav-data before taking off from Crete. I had no idea that the data transition from trans-Atlantic data to International data coincidentally began right after my first two reporting points!

9

JORDAN - BAHRAIN - OMAN

Out of the Frying Pan

I hadn't always had the means to support my interest in flying. In the 1970s, the Georgia Tech flying club was subsidized by the school so that students could afford to learn to fly. However, after leaving, flying could only be continued at my own expense. Renting a plane and buying fuel was very expensive, barely affordable on an engineer's salary. So, I did not fly much. Months, or even sometimes years, went by without any flying at all. Keeping proficient was difficult. Many times I had to take lessons just to get current again. Over the next twenty-five years, my flight proficiency suffered a great deal. But I always dreamed of owning a plane someday!

By 2005, AirSep was doing great, and I decided it was time to buy a plane. To fly again, I needed to get some proficiency back and update my medical certificate. Over the years, I had developed diabetes, high blood pressure, glaucoma, and an enlarged prostate. These conditions made obtaining an FAA medical certificate very difficult. Lots of documents from doctors and labs had to be submitted to the FAA, proving that these conditions were under control before they would grant me a medical certificate.

I hired an instructor named Bob Miller to help me get current. He was an extremely capable and genuinely caring instructor. He got me current, but knowing that my proficiency in flying was

marginal at best, he also advised I start with buying a simple plane. He thought I should start flying regularly, and in a couple of years, when my flying abilities had significantly improved, think about buying a more complex high-performance plane.

However, I was already 58 years old, with many medical conditions, and did not know how many more good years of flying I had left. Also, businesses go up and down, and I did not want to wait two years to buy something that I could afford now, but that might not be the case in the future.

And so, against my instructor's advice, in September 2005, I bought a Columbia 400, a high-performance plane that was the best I could afford at that time. Since I was not capable of flying it yet, I took Bob with me to the factory in Bend, Oregon, to fly it back to Buffalo. While Bob was busy checking the plane out at the factory, I decided to take the rental car to the gas station for a fill-up before returning it to the airport. While going to the gas station, I got into a car accident serious enough to total the car. Fortunately, other than minor cuts and bruises, I was not badly hurt. Later that day, Bob and I flew the plane back to Buffalo.

Since the Columbia 400 was a much more complex and high-performance plane, it took a few months of flying instructions before Bob would give me the go-ahead to fly solo. Even after flying my new plane by myself for a few weeks, I did not feel very comfortable with it. So, one day, I decided to ask Bob to come with me again. He was so disgusted with my flying skills that, without telling me, he wrote to Flight Standards District Office (FSDO) of Rochester, NY, to try to get them to cancel my pilot license altogether. He thought that I had too much to live for and should not risk it all by continuing to fly this high-performance, complex plane.

A few days later I got an official notice from FSDO recommending I take additional lessons from a CFII (Certified Flight Instructor Instrument) or risk losing my pilot license.

Even though Bob had only my well-being in mind, I still felt betrayed and afraid that I would lose my license – as I had with my motorbike license years earlier.

So, instead of taking the FSDO recommendation, I decided to join an Instrument Flight Rules (IFR) executive flight training program in Georgia. Compared to basic private pilot training, IFR training is higher-level training and much more expensive. Only 30% of the 500,000 private pilots in the United States have IFR training. I could afford it, and I felt that submitting an IFR rating in response to the FSDO recommendation letter would guarantee that I could keep my pilot license. I had no grand ambitions of flying the plane around the world yet. In fact, I didn't even want to travel far within the United States. I just wanted to be able to fly the plane around Buffalo for fun!

Little did I know that one day that IFR training would turn out to be the most important skill needed for a solo around the world flight.

Even after getting my IFR rating, I was busy with business and daunted by the bureaucracy involved with keeping my special issuance medical certificate current. I didn't fly much, and my flying proficiency stayed marginal. Flying felt like work for me; I never developed into an instinctive pilot.

However, with an IFR rating in hand, I felt a bit empowered and decided to try a short international flight. I wanted to get familiar with international flying protocols, and since Buffalo is on the US border with Canada, even a 10-mile flight could be international. I decided to go to Brampton Ontario, 50 miles away, to visit a friend. It was a very cold day with lots of snow on the ground. Brampton is a rather small airport close to Toronto International and controlled by Toronto Air Traffic Control (ATC). Toronto is the largest and busiest airport in Canada, and their ATC gave me rapid-fire instructions. This was not usually a problem for professional pilots, but I got extremely nervous, lost my situational awareness, and did not recognize the small runway (surrounded by snow all around) until I was almost on top of it. I approached the runway very high and, too nervous to ask ATC for a go-around, landed past half of the short runway. Unable to stop the plane in the remaining

length of the runway I crashed into the snowbank at the end of the runway, significantly damaging my plane's landing gear. My first international flight ended in disaster. At the time, I thought I would never fly internationally again.



After dinner and a short walk around town I returned to my hotel in Crete. I was ready to begin preparing for the next leg of my trip, through the Middle East.

I chatted with Eddie on messenger:

EDDIE: *How is the hotel? Have you got a view out over the harbor, or on the back side?*

MYSELF: *Good. Harbor view! But I really did not walk around the hotel much. I just went to the town and had a drink and some food. Now I need to think of writing something for the blog, make my phone calls, and get things in order for tomorrow! I'm trying hard to not have any problems. So far so good. My temperature fluctuation issue is fixed. All is perfect with the plane now!*

EDDIE: *That's good news...something I have to ask...can you change your Jordanian stop from Queen Alia Airport, Amman to Marrka Airport in Amman itself.*

MYSELF: *Sure. But can you send me a flight plan I can use? I still have problems with flight plan filings!*

EDDIE: *I think Ahmed can help you with this.*

AHMED: *No problem. I will do your flight plan and send it to you in 30 mins. I'm just having lunch.*

MYSELF: *Great.*

EDDIE: *Ravi, this is what I have following Kolkata in India. Are there any changes you need to tell us about that are different to this... Chiang Mai, Bangkok, Kuala Lumpur, Kuching, Kota, Kinabalu, Manila, Okinawa, Kagoshima, Niigata, Sapparo and then to Khomutovo.*

MYSELF: *Eddie, I can fly 850 NM legs. I need to finish my trip the fastest I can. Evgeny suggested that I use Petropavsk, now that he can get Avgas there. I have someone offering me Avgas at Adak in the Aleutian Islands, Alaska. So, with favorable conditions, I need to make only one stop in Russia! Anyway, if you have any suggestions I will be fine with anything after India, except, I must go to Kuala Lumpur, as I have arranged for 100 hour service for my plane there.*

EDDIE: *OK, we will sort the Russian/Alaska stuff closer to the time...it's the immediate need for permits following India we want to get sorted out now. The schedule above is fine.*

AHMED: *Can you confirm how many barrels you will need at Bahrain?*

MYSELF: *Amman to Bahrain is long flight. I would need 2 barrels. Get a barrel for me at Bahrain. That will be sufficient, as Bahrain to Muscat is only 450 NM.*

AHMED: *Copied.*

MYSELF: *Do we need slots for landing at Amman?*

AHMED: *Only landing permit is required.*

MYSELF: *Great. Can you please send a flight plan I can file for FL170 departing from Crete at 08:00 UTC?*

AHMED: *Yes, in few seconds. Working on it.*

MYSELF: *If lower flight levels are shorter I will take that!*

AHMED: *Your max range is 800 NM, Right?*

MYSELF: *1100 NM with no wind!*

AHMED: *890 NM. I think it should be ok? There are some restrictions (too many actually) on that route. So I am trying to do the shortest possible route. It's a very ugly looking route!*

Airplanes with a landing destination in Arabian countries are not allowed to fly over Israeli airspace! So, the routing from Crete to Amman required flying around Israel as shown below:



Crete-Amman flight route, as flown to avoid flying over Israel

Considering how long the flight is going to be, I asked Ahmed to change my departure time to an hour earlier.

EDDIE: *Good morning Ravi. Just checking in. Answer when ready. Everything ok?*

MYSELF: Leaving from Crete was a big hassle due to time constraints. Just getting settled in flying.

EDDIE: *Welcome to Egypt. Stand by for desert photos. This would have been the perfect route if going to October airport ...but you may get close to the Pyramids, but too high.*

MYSELF: Great. Thanks. I will look for the Pyramids! I hope I see them.

EDDIE: *Hi Ravi, you missed us, the Pyramids and October airport by miles. But you did get to go over the Fayoum oasis. Have you got an updated ETA for Amman please?*

MYSELF: *ETA 13:00.*

EDDIE: *Did you know you are now in Asia? Hotel details for Amman...if you use their airport shuttle service to return to the airport make sure they know it is Markka you are going to and not Queen Alia.*

MYSELF: Thanks Eddie. I just arrived at the hotel. I will again need Ahmed to file my Flight plan from here to Bahrain. FL

170 ETD 7:00 UTC. The flight today was very long. I had no wind or headwind most of the time. I had only 15 gallons left when landed!

After landing at Amman, the handler took me to the hotel. I settled in, wrote my blog, and posted it on my website:

The long and winding road to Amman

The strict Air Traffic Control at Crete gave me a 25-minute time slot to depart. If I did not leave within that slot, I would have to file a delayed flight plan and wait for a slot to open up.

I got to the airport in plenty of time, so I thought, but the Crete airport is a fairly large international airport, teeming with tourists. By the time I cleared customs, fueled up the plane, paid my bills, and got ready to go, I had less than 10 minutes left in my slotted time. Somehow I managed to take off in the allotted time. It was only after takeoff that I got the real surprise when ATC radioed me an amended routing to Amman. It was even more crooked than the one I had received earlier. This long and winding route had me flying around Israel and crossing waypoints that were not on the way to Amman. The total distance turned out to be over 1050 NM. The straight distance from Crete to Amman is only 577 NM!

I had no choice but to carry on. Unlike yesterday, when I had dream tailwinds that I did not want, today, when I needed tailwinds, I had headwinds or no winds all the way. It took over six hours to reach Amman. Moreover, all of my flight was either over the water or the desert. There was nothing really to look at. As I crossed the Mediterranean and entered Egypt, it felt as if I was about to enter a sand storm. Fortunately, I was pretty high and had no problems. I was tired but happy to be in Amman!

Amman is a bustling and beautiful city. I spent the night at the beautiful and inexpensive (\$80/night) Century Park hotel. In the morning, the ground handler for my plane came to pick me up. Before starting from the hotel, he wanted me to settle the bill (no credit card, cash only). The invoice was for \$1200

(excluding hotel and fuel). I did not understand most of the charges, but what stood out was a \$200 charge for transporting me to the hotel and back. The hotel was only 6 KM away from the airport. Not much I could do but to pay the invoice. Feeling a bit ripped off, I headed for the airport.

The Marka International Airport is one of two international airports in Amman, Queen Alia being the main one. Marka is not much in use, and I was the only one passing through this morning. With lots of security people around, I had to go through three separate security check stations with metal detector doors and x-ray machines. These security checkpoints were within 10 yards of each other. It was hard to understand why I and my luggage had to go through metal detectors and x-ray machines three times, but they cleared me, and I was finally ready to leave for Bahrain.

Thankfully, Ahmed was able to get straight routing for this leg of the flight. I texted:

MYSELF: *Off to Bahrain. Nice stop at Amman. Cheap hotel and fuel, but very expensive handling. It was \$1200, including \$200 for a car to bring me to the hotel and back!*

EDDIE: *Good morning, Ravi. Yes, the Arab countries certainly like to fleece visiting pilots. I will check with Ahmed just in case he can get a discount for you. Not much for you to see today...desert and more desert, the occasional road. If you get a chance, try and get some photos, especially of N2526B on the ground in these new places--some in flight and some in the city. It helps make for a good post.*

My flight from Amman to Bahrain was 875 NM long. As I reached my assigned altitude of 17,000 feet, I encountered headwinds. With these headwinds, I was barely going to make it to Bahrain, not a comforting thought. I texted the situation to Eddie. He checked the weather information available to him and determined that if I climbed to 19,000 feet I would have tailwinds instead of headwinds.

It was hard to believe, but, sure enough, when I climbed to 19,000 feet, the headwinds became tailwinds.

MYSELF: *Thanks Eddie, I'm now at 19,000, with tailwinds. I'll easily make it to Bahrain. THANKS!*

EDDIE: *Phew...let me know if it changes...I will send weather report on request.*

MYSELF: *OK. Thanks ETA 11:50 UTC.*

EDDIE: *Copied on ETA, and sorting out your hotel.your hotel Movenpick Hotel Bahrain Muharraq is 5 star, very close to airport, at the entrance road. Don't pay for stupid transport by handlers. Get a taxi or see if it is reachable on foot or has a walkway.*

MYSELF: *OK, I will just walk. I'll spend the money on drink instead!*

EDDIE: *A man after my own heart! I wish I could join you for a cold beer...it's 37c where I am sitting!*

MYSELF: *It is pretty hot in Bahrain as well.*

EDDIE: *There's a good chance you will meet an airline crew on layover at the bar! My advice is to stay out of the sun, but you might get a breeze off the Persian Gulf. Only a couple of days ago you were looking at the River Mersey!*

All of my flight was over the Saudi desert. There was nothing I could see except a line in the sand that was the highway crossing the desert. I wondered how the Bedouins ever crossed such a vast desert on camels!

When I landed, it was sunny and over 100 degrees. The desert heat in Bahrain was stifling, and I was happy to arrive at my hotel. After checking into my room, I texted Eddie and Ahmed again:

MYSELF: *Great hotel! I just walked here.*

AHMED: *Hi Ravi. Well done on today's flight.*

MYSELF: *I am super happy that everything has gone exceptionally well. It is all because of you guys. I feel you both are flying with me. I had no idea how important your services are. I do not believe a flight like this can be done without your*

help! Can you please again file a plan for me from Bahrain to Muscat ETD 7:00 UTC?

AHMED: *Thanks Ravi we are glad to be of help and we are happy you are enjoying your flight so far. Tomorrow will be a 3 hour flight. I will select a route that will keep you out of Qatar airspace because of the trouble with other gulf countries. UAE don't require an overflying permit. The Oman permit was finally granted, as they wanted you to have a Tow bar onboard to be connected to a pushback. This is your Oman permit: DAT/RHAN/0001/2017*

MYSELF: *This plan is great. Please file it. Thanks!*

AHMED: *Thank You Ravi. I'm always glad to help.*

MYSELF: *Another question, did you get any feedback on AOR (Air Operations Routine) for Ambala? I have an influential contact with the Air Force, maybe he can help. Thanks.*

AHMED: *For India, our agents sent this message: We got a permit for Ahmedabad but the Ambala airport is a bit problematic because it is a military airport. Please note that Ambala is a defense controlled airport therefore parking of our aircraft for six days may not be permitted. We will try our best for the same. Please advise if the Captain has some local arrangement/contacts for the same.*

MYSELF: *Just ask the agent to get in touch with Rahul and ask for help on Ambala. He is the Wing Commander who flew an ultralight around the world for the Indian Air Force's Silver Jubilee celebration. He has offered to help!*

AHMED: *Yes, we just did that. Here is the most recent message from the agent in India: Dear Sir, We are in touch with Wing Commander Monga and the Ambala Base for parking space, and we may get clearance by tomorrow from Ambala. We will keep you posted accordingly by tomorrow 1000Z.*

The next day Ahmed sends me the flight route from Muscat to Ahmedabad for review:

MYSELF: *Great. I will look at these when I get back to room. I am at the bar. Needed a drink!*

AHMED: *Ha! Sure, no problem,*

Next stop Muscat, Oman!

EDDIE: *Good morning Ravi, is everything OK? Not so long a flight for you today. Are you meeting someone in Oman or did that fall through?*

MYSELF: *I am meeting someone. But you need to get me a hotel!*

MYSELF: *My inReach got too hot. Are you receiving me Eddie?*

EDDIE: *Yes, Are you? Previous pilots have had their heat problems affect iPads and phones and trackers. I have that problem daily...I need to create a cold room to put my PC in – or get the landlord to buy a new air conditioner...the chances of that are zero though...The inReach unit has to be able to see the sky so it will be in direct sunshine. There may be a delay in the transmissions. Can you confirm just one night in Oman, and if you need to be closer to the city or the airport?*

MYSELF: *One night only. Near the city please!*

EDDIE: *Copied...near the city it will be.*

MYSELF: *I am not sure if I have any issues with my fuel pump. The fuel flow was fluctuating on the climb out. Do you think I can get my plane checked at Muscat, if needed?*

EDDIE: *Very unlikely. They don't like General Aviation and will probably park you miles from the terminal and hangars. We hate this airport as every pilot who goes there complains. Do you think it was the heat? Keep an eye on that and if needed you can divert to Al Bateen Executive airport. It's good there for GA and they also have maintenance facilities.*

MYSELF: *With vapor suppression, it is steady. I do think it is heat and vapor lock issue only, but I just want to make sure. I had that on the way to Jordan, too. Anyway, it seems to be fine now! I will check with my mechanic and see if it needs to be checked.*

EDDIE: *Here are your hotel details: Grand Hyatt Muscat Shatti Al Qurum The Hyatt is something else – wait till you see the luxury!*

Eddie sent me the weather report for Muscat airport and reminded me to keep my slot time in mind and adjust my airspeed accordingly.

In Muscat, I met Mr. Sulaiman Al Mufargi, a wannabe Earthrounder who had been communicating with me and following my flight for a while. He picked me up at the airport and drove me to the Hyatt, my hotel for the evening. The drive to the hotel went through most of Muscat. It was a beautiful town – it even had a Buffalo Wing Restaurant! I checked in at a Hyatt built like a castle. It was fabulous, probably the best hotel I have ever visited.



With Sulaiman Al Mufargi at Hyatt Muscat

Before going to bed, I did my usual chatting with GASE:

MYSELF: *Just checked in. The hotel is fabulous!*

AHMED: *Hi Ravi, welcome to Oman! I have some good news for you. Amman will refund around 300 USD.*

MYSELF: *WOW! You guys are unbelievable!*

AHMED: *Thanks Ravi!*

MYSELF: *Has the agent in India sent his request to Ambala? The Chief Operations Officer at the Air Force base is waiting*

for it so he can approve it right away. At Muscat, I am not sure who I contact tomorrow for fueling, etc. I am not sure who the handlers are. Someone from Oman Air got me a bus to the terminal and then I was on my own! He had no idea what needs to be done for fuel.

AHMED: *Oman Air are the handlers. Ask them for fuel and they will call the supplier, too. For your next flight Muscat/Ahmedabad your route will take you through Pakistan airspace. We're just waiting for the Pakistan overflight permit. Here it is: NS # 1707-0628 DTD: 17 JUL 2017 ***

MYSELF: *Please file the flight plan for Muscat-Ahmedabad, ETD 6:00 UTC*

AHMED: *Will file it soon! Ravi, can you please let us know your plans going forward from India? My suggestion based on the most economic route in terms of handling and ease / flexibility of slots are as follows: Kolkata/U-tapao. U-tapao/Kuala Lumpur. Bangladesh is a very expensive place to be. A stop there can be 2000 USD++ Same for Northern Thailand, slots are controlled by some of the big handlers there like Mjets and they charge high fees for everything, so I would avoid that. The cheapest in Thailand would be U-tapao.*

MYSELF: *I have no plan of my own. I will take your recommendations. After Kolkata, whatever you suggest is fine.*

EDDIE: *Hi Ravi, we always suggest - Kuala Lumpur (Subang) because we have great contacts there. They are the Malaysia Chapter of the EAA and are personal friends who have looked after dozens of our crews. Every visiting crew has nothing but praise for them.*

MYSELF: *That is great Eddie. I have arranged an oil change and 100 hour service there.*

EDDIE: *Do you know who with?*

MYSELF: *Muhammad Yusof, he is FAA and A&P certified and was recommended to me by an Earthrounder named Stefan Momertz.*

EDDIE: *Is that Hyatt Muscat as posh as it looks in the photos?*

MYSELF: *Yes, it is really grand. Sulaiman took me around a bit in Muscat. It is an unbelievable town, too. I had no idea!*

EDDIE: *So I have heard! It has a great interior too with the mountains and wildlife.*

MYSELF: *Check out my blog from yesterday!*

EDDIE: *Will do...was it the one about being ripped off in Amman?*

MYSELF: *Similar but at Bahrain! I don't believe I can get a Liverpool reception anywhere else!*

EDDIE: *It's a pity that nonsense happened with Qatar as that is where we usually send our flights.*

Eddie was referring to the Qatar Diplomatic Crisis, which began in 2017 when a Saudi-led coalition severed diplomatic ties with Qatar and banned Qatari airships and planes from using their airspace.

MYSELF: *It is the Middle East. Such nonsense happens there all the time. But the people individually are incredibly hospitable!*

10

INDIA - THAILAND

Returning Home

Flying in the desert was a new experience for me. I don't have air conditioning in my plane. While cruising at any reasonable altitude, it is cold enough, and the plane is very comfortable, but on the ground in the desert, while checking things out after startup and waiting for clearances from ATC, it was unbearably hot. I probably lost a pound of sweat in the 10-15 min that I was on the ground. Moreover, even though it was sunny all the time, visibility and ceilings were extremely low due to lots of sand dust in the air. I would classify the landings to be in the low IFR range. While landing in Bahrain, I did not see the runway until I was about to touch down. The same was true in Muscat! With all that said, after staying in Buffalo for 40 years, I didn't think I could ever get used to the desert. I miss the snow already!

By this point in my trip, I realized I needed to get used to outrageous handling and fuel charges. The handling at Bahrain was \$710, and the barrel of Avgas \$1000. The only good thing was that I did not have to pump the gas from the barrel myself. They brought an air compressor and a pump to the plane. As for the handling charges and the cost of gas, I tried not to care. It was what it was. I was just too excited to get to India.

After Muscat, my next stop was Ahmedabad, India!

MYSELF: *Are you tracking?*

EDDIE: *Good morning Ravi, yes, I am tracking. I was getting worried about a late departure. The tracker started late...do you have an ETD from Muscat and an ETA for Ahmedabad? I need to send MVT (movement report) as soon as possible.*

MYSELF: *ETA. Ahmedabad. 12:30 UTC.*

EDDIE: *Cheers, copied ETA...are you staying overnight there?*

MYSELF: *Yes, with family. I will go to Ambala as soon as I get clearance, hopefully, tomorrow. My wife already flew there yesterday. They are all waiting!*

EDDIE: *Cheers, I will word post accordingly.*

MYSELF: *Just so you know, the landing and handling at Muscat was \$1250. Ouch!*

EDDIE: *Do you remember us asking why on earth you wanted to go to Muscat and that we said it is the worst for General Aviation?*

MYSELF: *Eddie after my experience in Muscat, please suggest any routing for the rest of my RTW, after Ambala that I can take without exorbitant charges. I will follow it!*

EDDIE: *India is expensive even with our \$500 discount. But you need to get to U-Tapao as it's the best for GA in Thailand. Kuala Lumpur will be a relief for you and your wallet. You are almost at Ahmedabad...so I will wish you a happy homecoming and a great time with family and friends. I'll catch up with you later.*

MYSELF: *Landed!*

I had made it to Ahmedabad, India! That night I wrote the following blog post:

After sitting in stifling heat from the desert sun for half an hour, while taxiing and waiting for clearance, I was more than ready for takeoff from Muscat. It was the last leg of my flight to India, and my heart was racing. So, as soon as the tower cleared me for takeoff, I full throttled the plane, climbed to my assigned 15,000 feet, and headed over the Arabian Sea. After flying for four hours, the Pakistani controller handed me over to the

Indian controller. This controller must have been handling at least twenty flights at a time. I have never experienced such a busy controller. This controller had an extraordinary talent to calmly handle so many flights at one time. The instructions were coming like bullets from an AK 47-- very professional, very impressive. He vectored me for an instrument approach to RWY 23, and I landed. My first landing in India!

I really hope the civil aviation authorities get some more help for these poor controllers in India, working at such a fast pace continuously is just not humanly possible.

The welcome given to me after landing in Ahmedabad was incredible. My nephew Rajneesh Bansal along with the representatives of Aggarwal Samaj received me at the airport and took me to the reception they had specially arranged for me. All the major local and national papers and TV channels covered my story.

So far, my flight has gone smoothly, much better than expected. The main reason for this is the incredible great work done by my logistics support team at GASE. (General Aviation Support Service Egypt). They arranged all my overflight and landing permits, ground handling services, prepared and filed all my flight plans, arranged for Avgas and hotel stays. They even continuously tracked my flight and communicated with me during flight, beaming weather reports and helping me pick out flight levels where the winds were more favorable.

Thank you, Eddie and Ahmed! I could not have done it without your help. You both are my incredible partners in flight; I feel as if you are always sitting next to me while flying. Exemplary service!

Next stop Ambala!



Reception at Aggarwal Smaj, Ahemdabad, India

AHMED: *Hi Ravi, are you around? I haven't heard from you today!*

MYSELF: *Hi Ahmed, I finally got home after several receptions. Please update me about the permission at Ambala.*

AHMED: *as I mentioned earlier, parking at Ambala was approved yesterday. India CAA needs to grant the permit accordingly and based on parking approval. That will be done this afternoon. I confirmed with the agents that permit is not yet granted but it will be issued this afternoon.*

MYSELF: *OK. When you have it, please file the flight plan and let me know. Thanks!*

AHMED: *Will do, no worries. Ravi, here is the message from Bobby, our agent in India, a few minutes ago: "we will receive permit approval from DGCA by the end of day today, Air HQ has already approved as I informed you yesterday, so all sorted out."*

AHMED: *Ravi, your permit is granted: YA/N/0675/07/200555. I will file the flight plan once I am home.*

MYSELF: *Thanks for letting me know. This is exciting. I am probably the only private pilot ever granted such permission at Ambala!*

EDDIE: *Brilliant. Only with GASE!*

MYSELF: *Yes!*

EDDIE: *Great work, Ahmed. Now everyone will want to land at Indian Air Force bases!*

MYSELF: *Thanks, Ahmed. They want me reach Ambala earlier than I had planned. ETD 3:30 UTC is what I want.*

AHMED: *your flight plan has been filed:*

MYSELF: *Thanks, Ahmed.*

After takeoff from Ahmedabad, I was on my way to Ambala.

EDDIE: *Not a long flight today but some massive scenery to fly over. By the way...do you have your accommodations sorted out in Ambala?*

MYSELF: *I hope so! I may have to use a bunk bed. All my family is waiting. I might have to just sleep on a rug on the floor. Too many people in a small house!*

EDDIE: *You must send us photos of you sleeping on the floor - in case people think you have 5 star luxury at each stop. By the way, thank you for the very kind words about us on the blog. We are very humbled by your words. It was a very nice review which we will cherish.*

MYSELF: *You are welcome. You certainly deserve them.*

EDDIE: *Thank you. Soon you'll be passing New Delhi. Not far to go!*

MYSELF: *ATC just told me **Cleared Direct Destination** (Ambala!)*

EDDIE: *Sounds like you're a priority figure. Check out my post to see the Indian Air Force at Ambala looking after a child with cancer. They seem to have a big heart at IAF Ambala!*

MYSELF: *Thanks. Landing now!*

EDDIE: *OK, catch up with you later...enjoy the welcome and have a great day!*

A Dream Comes True: Landed at Air Force Base, Ambala!

In an incredible act of grace and generosity towards me, Rotarians, citizens of Ambala, and Air Officer Commanding L .K. Chawla granted me the very rare, if ever granted, permission to land and park my plane at the Indian Air Force Base.

He, along with his staff, Chief Administrative Officer N. K. Singh and Chief Operating Officer A. Srivastava, also greeted me at the base. I thank them all, as well as Wing Commander Rahul Monga, from the bottom of my heart for helping my dream come true.



Airforce Base and Rotary Ambala reception (July 23, 2017)

After the reception at the base, a police escort drove me to my home. Later, I was invited by the Rotarians in Ambala to be the guest of honor at their installation meeting. The next morning I was

invited as a chief guest at the annual prize distribution function at the Taneja Public School. The reception that the Ambala Rotarians and citizens gave me as one of their native sons extremely humbled me. I was overwhelmed.

After such a moving reception, my mission continued. Next stop Kolkata!

MYSELF: *Hi Ahmed, can you please send me the tentative flight plan for Ambala-Kolkata at FL170 when convenient? Thanks.*

AHMED: *Sure. We need to finalize a date for your next trips so I can apply for further permits.*

MYSELF: *Eddie wanted to suggest a route to USA from Kolkata that is doable and does not have exorbitantly priced handlers or fuel. Can you please suggest? Thanks.*

EDDIE: *What I was talking about was also what Ahmed suggested: That was from Kolkata - U-Tapao - Kuala Lumpur - Then on up through Burma, Philippines, Japan, and Russia. Except for Kuala Lumpur, there is no real place where the prices are not exorbitant. What I mentioned was that the prices we have arranged are a lot less expensive than if you had gone with someone else, but, in comparison with the USA, they are still high. I will have another look when I am recovered – I'm just back from the dentist.*

EDDIE: *Ravi, we need to make arrangements for Thailand as soon as possible. The Thailand permit is only good for 24 hours so we need to know what day you will arrive and what day you will depart. I know weather can be a problem and there is nothing we can do about that but, to apply, we need to put in an arrival date and a departure date....*

MYSELF: *Tentatively I plan to leave Kolkata on 28th for U-tapao. Kolkata to U-tapao is 933 NM direct. Unless I have tailwinds, it is pretty long and I need to think about it!*

MYSELF: *Please file my flight plan from Ambala-Kolkata with a departure time of 0430 UTC and ETA of 0930 at Kolkata. Thanks.*



With Subhash and family at the Ambala Air Force Base

EDDIE: *I bet you were sad to leave Ambala. It was a heartwarming stop for you, I think.*

MYSELF: *It was unbelievable. I got tremendous press coverage. The Air Force were incredibly helpful. The Air Officer Commanding Lalit Chawla Invited me to his home for drinks!*

EDDIE: *I saw loads of photos from you and from many others of your special welcomes. Even the local school put on a great event for you. A memorable stop for you, indeed!*

EDDIE: *Do you need us to book your hotel in Kolkata?*

MYSELF: *No, I am staying with friends. Thanks.*

EDDIE: *Copied on accommodation. Enjoy your stay there, it is a bustling and noisy city apparently!*

MYSELF: *Never been there!*

EDDIE: *Plenty of places you have never been to, to come! Kolkata's main problem is the slow turn around at the airport. Snail speed and the worst anywhere.*

MYSELF: *I will go there maybe 3 hours earlier than ETD.*

EDDIE: *If you have the fuel already on board, then departure should be quicker.*

MYSELF: *I only have 30 Gallons! By the way, I'm currently in 28 Knots headwinds at 17,000 feet! But I'm above the clouds!*

EDDIE: *Do you want me to check the winds?*

MYSELF: *I can only go higher. It's too cloudy below!*

EDDIE: *Let me check the winds.*

MYSELF: *Please. It seems like I am going backwards!*

EDDIE: *I have headwinds all the way but only 6 knots at 18,000ft between Allahabad (almost there) and Ranchi and they become almost tailwinds.*

MYSELF: *I will ask for higher!*

EDDIE: *It gets better the closer you get to Kolkata.*

MYSELF: *Thanks. But I am afraid the TurtlePac may burst if I go any higher! It seems pretty pressurized!*

EDDIE: *Is it possible to start using the fuel out of the TurtlePac to release the pressure?*

MYSELF: *I've decided to stay at 17,000 feet. There's less headwind now.*

EDDIE: *Copied...I am checking TurtlePac for pressurization issues.*

MYSELF: *I am OK. Don't worry. It is fine!*

EDDIE: *I said it would ease off from Allahabad. But for your peace of mind, standard grade fabric TurtlePac Ferry Tanks will exceed the pressure resistance of aluminum ferry tanks typically by 300%. (from website). Matt Guthmiller had an aluminum ferry tank and he regularly flew at 24,000 feet.*

MYSELF: *No problem with TurtlePac! I am good then!*

EDDIE: *Great stuff. I see your speed has gone up too!*

MYSELF: *Who are my handlers at Kolkata? Also weather report for Kolkata Airport?*

EDDIE: *Sorry for the delay. My PC just blew with a loud bang! The handlers are Aerotech again. I am on my wife's laptop and I have no files on here, so I'm a bit lost.*

MYSELF: *No problem. Thanks.*

EDDIE: *Almost there, Ravi. Well done! We'll chat when you are settled in. Enjoy!*

After settling in at my friend's place in Kolkata, I wrote another blog post:

Departing Ambala!

After a heartwarming week of Rotary celebrations and welcome parties, I departed Ambala for Kolkata on July 27th. Once again, the staff of Air Officer Commanding, L.K. Chawla was extremely gracious in helping me get ready for my departure. They helped refuel the plane, and got the weather briefing and the clearances necessary to depart from an Air Force Base. Due to strong headwinds, the flight from Ambala to Kolkata turned out to be the longest duration flight of the trip to date and I was pretty tired by the time I reached Kolkata. I was received by Sanjay Choudhary, the brother of a close friend of mine in Buffalo, Dr. Ajay Chaudhry. The hospitality bestowed on me by Sanjay and his family was excellent. Thanks Sanjay, it was a delight to visit with you and your family!

EDDIE: *Good morning Ravi, if you are reading this can you check in with us please?*

MYSELF: *Can you please file my flight plan for Kolkata to U-tapao for 04:30 UTC tomorrow?*

AHMED: *What's your ETA at U-Tapao?*

MYSELF: *I think 10:00 UTC.*

AHMED: *Your slot is for 0900Z. Did you get fuel yet?*

MYSELF: *The barrel is there but I need to load the fuel myself. With a decent tailwind, I hope to make my slot!*

AHMED: *Great!*

MYSELF: *It is a document nightmare in Kolkata. I am very frustrated and do not want to go back in, so I am still hoping to leave today.*

EDDIE: *Kolkata has gone down the drain recently. Keep me updated so I can alert Thailand one way or another. Please put safety first.*

MYSELF: *Departed Kolkata! On to U-tapao. I am airborne. Too much red tape. It's a very long story! I am at 17,000 feet with no tailwind. Is it better at any other level?*

EDDIE: *I am in a predicament at the moment. My PC is blown and I am taking it to the shop at 1300Z. I'm using my wife's laptop which has none of my apps or logins or files.*

MYSELF: *No Problem. Just get me a hotel and handler. Thanks!*

EDDIE: *I'll be able to sort that out. It's complete chaos at the moment with not having full capability.*

MYSELF: *It was a bitch for me too! It's been a horrible day! I am going to U-Tapao ETA 17:02 UTC. What is the hotel name in U-Tapao? I need to tell the Rotarians where to come!*

After settling into my hotel in U-Tapao, I posted the following blog:

All Good Things Must End

As the saying goes: all good things must end. The departure from Kolkata was an entirely different experience. Kolkata, in my opinion, is the red tape capital of the world. Avgas is normally not used at this airport and clearance from many departments was required before I could refuel. Any and all things, no matter how irrelevant, were turned into the most important, as if your life depended on it. Re-fueling only a barrel of Avgas required five hours.

It was similarly arduous to file my flight plan, every little detail had to be perfect, and three original signed copies had to be submitted. I was about to start the engine when the flight service station asked me to come to their office and sign the flight plan. The flight service station unbeknown to me was outside the sterile area of the airport. I had stepped out without taking my identification papers and so was not permitted to come back in. It took two hours of pleading with various authorities before I could get back in. I had reached Kolkata Airport at 7:30 AM, but by the time I finally departed, it was 7:00 PM. The flight from Kolkata to U-Tapao was 950 NM, the longest of the trip of my RTW so far, with most of it over the Bay of Bengal. Normally, I would not fly over the ocean at night,

but since the weather was good and I was just so frustrated, I decided not to take a chance on waiting until the next day and carried on with the flight.

Next stop U-Tapao, Thailand!

I had not flown at night for quite a long time, so it was a very different experience. I could see frequent lightning strikes in the distant Northern sky. Even though I knew there were strong thunderstorms north of my flight path even before departing Kolkata, it was a bit scary to see that in the night sky. These thunderstorms were quite far away but seemed so close!

After a long night flight from Kolkata, India, I arrived at U-Tapao airport at half-past twelve AM. As an International airport, U-Tapao has a long, wide runway, but it is very dimly lit. So, I ended up making a bit harder than normal landing. But with all the commotions of Kolkata behind me, I was very glad to arrive.

Even though it was past midnight and the airport was closed for the night, two Rotarians from the Rotary Club of Bangkok Klongtoey, Mr. Peter Chiaravanont (a cancer survivor) and Mr. Suwatchai Phongbunjert, welcomed me at the airport. These two Rotarians had driven from Bangkok (a two-hour drive), especially to welcome me to Thailand. It was late for them to drive back to Bangkok, so they stayed for the night at my hotel. In the morning, they ceremonially presented the flag of their club to me, along with a \$2100 check on behalf of Thailand RI Districts 3330-3340-3350-3360, in support of my mission. I can't thank them enough for their extremely generous support. Truly service above self!



**Suwatchai Phongbunjert, Myself and Mr. Peter Chiaravanont
Pattaya, Thailand**

Peter and Suwatchai showed me around Pattaya, a beautiful and vibrant resort very popular with international tourists. Thanks, Peter and Suwatchai, for your generosity and hospitality. It will stay in my heart forever. Next stop Kuala Lumpur!

11

MALAYSIA - PHILIPPINES - JAPAN

(New Places, New Rules)

My stay at Kuala Lumpur is truly a story of devils and the angels. I stayed with Dr. Thanikachalam, a classmate of my wife. He was extremely hospitable, and I enjoyed getting to know him. After spending a night at his residence. I got ready for the next leg of my journey to Palawan. I picked Palawan since, beyond Kuala Lumpur, Avgas was not available at any airport along the route of my flight until Palawan, Philippines, a distance of 1200 NM. That distance was pushing the range of my plane to the limit, and I could not fly safely over the ocean for that distance. My plan, therefore, was to carry 32 gallons of fuel in the TurtlePac on the passenger seat with me. I would fly 883 NM (a distance my plane could easily make without refueling) over the ocean to Kota Kinabalu Malaysia, land there, transfer Avgas from the TurtlePac to the plane and then fly the rest of the 300 NM, over the ocean on to Palawan.

I had one previous experience of flying while carrying fuel in a TurtlePac, on my leg from Ambala to Kolkata. I had planned to fly at an altitude of 17,000 feet. TurtlePacs are made of flexible fabric strong enough to carry Avgas up to an altitude of 24,000 ft. However, it was a bit scary to see the Turtlepac expanding next to me while climbing. I climbed to 11,000 feet and did not want to go

any higher. So, now that again, I was going to carry gas in TurtlePac, I wanted to fly at the lowest practical altitude for this leg.

It was raining, and there were thunderstorms at the airport, but the forecast along my flight route was for clear skies and tailwinds all the way. Also, the winds aloft forecast at 11,000 feet was tailwinds. I selected 11,000 ft altitude for my flight to Kota Kinabalu. I was itching to go, but I did not want to take off in a thunderstorm. Fortunately, there was a break in the local weather, so I took advantage of it and departed. My flight was under Malaysian controllers for the first hour, and they were extremely nice. But then, as I entered Singapore air space, I was handed over to a Singapore controller.

The South China Sea, controlled by Singapore ATC, is an area where either HF radio or satellite phone is required for communication. This controller asked me if I had a satellite phone. I had one, and I told him so. He then asked me to make a test call to him on my satellite phone. Unfortunately, my satellite phone (a brand new one at that) refused to work. While I was trying to sort out what was wrong with the phone, the controller started to get very impatient and became extremely rude, even though we were communicating through airline pilots who were flying in the area and were nice enough to assist us in communicating. All that was needed was that I be able to relay my position at reporting points. It was acceptable to communicate through airline pilots when I crossed the North Atlantic. But this controller refused to accept this arrangement. He told me that he had canceled my clearance and that I must turn back immediately. Nothing like this had ever happened to me before. I pleaded with him that I was almost halfway to my destination and he should let me continue. He refused to budge and made me turn back. My communication transcript with GASE during this ordeal went like this:

MYSELF: *Eddie can you please find my satellite phone number for me, quick? Or they will make me turn back.*

EDDIE: *Where would it likely be?*

MYSELF: *I sent it to Ahmed.*

EDDIE: *Oh dear...standby. Iridium Phone Number: (8816) 326 73135. Confirm receipt of phone number. I need a coffee...back in 2 minutes.*

MYSELF: *They want me to go back.*

EDDIE: *Why?*

MYSELF: *My satellite phone is not getting a network.*

EDDIE: *Won't they let you relay via airliners? You have a transponder as well. How are they in touch with you?*

MYSELF: *Damn it, they canceled my clearance!*

EDDIE: *Ravi, are you there? Have they said why they revoked the clearance? I see you turning back, any reasons? You need to let me know what has exactly been said to you as to why they canceled your clearance. I don't want to write to them without proper details.*

MYSELF: *They told me I must have UHF radio on-board. They turned me back.*

EDDIE: *So nothing to do with your satellite phone?*

MYSELF: *Yes. They were at first okay with it. But when I couldn't find my satellite phone number quick they got impatient. What should I do now?*

EDDIE: *I don't know what they are playing at, but if the satellite phone is not working then you need to see to that.*

MYSELF: *I have no idea what to do now. I am just so frustrated. I should have climbed to 17,000 feet. I am not sure why the satellite phone can't find a satellite.*

EDDIE: *OK, we need to do this one step at a time. We can work it out, but let's get you on the ground and see what is happening. We will do the autopsy on the ground. Let me get you back into Kuala Lumpur first...stand by for update. Do you think you will stay overnight?*

MYSELF: *No, I want to go, but how? Let me get my mind cleared.*

EDDIE: *Ravi, please don't panic...we can sort this out as long as we stay calm. Reflections and what-ifs can come later. Safety*

first. Do the thinking on the ground. Can you come up with an ETA for Kuala Lumpur?

MYSELF: *ETA 0647.*

EDDIE: *Copied. Give me details so I can alert Skypark...ETA and plans.. Overnight? Refuel and try again? I will let Skypark know you are returning. I am available here or on messenger all day, so we will see how it goes on the ground. Should I find a hotel for you at the airport?*

MYSELF: *Wait on the hotel.*

EDDIE: *Copied. Skypark is all set for your arrival...so no worries there. Wasn't sure if you said get a hotel or wait?*

MYSELF: *Just wait.*

EDDIE: *Looks like you may be there a bit earlier than 0647?*

MYSELF: *Maybe.*

EDDIE: *No worries, I think there won't be much in it, not enough to change the ETA for Skypark. Ravi, you are almost there and on arrival you will be discussing with the handlers what has happened. I need to be in the loop with you on any decisions.*

The controllers at the airport in Kuala Lumpur were perplexed when they saw me return. They told me that this should have never happened and the Singapore controller had no authority to cancel my clearance midway and turn me back. Even more so, as the weather at Kuala Lumpur had rapidly deteriorated beyond safe. Anyway, I learned my lesson and will never be bullied by a devil controller again!

Back in Kuala Lumpur, the staff at Skypark (my agents), Ms. Tan Bee Wah, Manager of Customer Relations, Sri Ganesh Thangarajai, Senior Executive, Ronald James Abrahams, Operations Consultant, Ibrahim Bin Gulong, Operations Supervisor, and their entire staff, I must say are all angels. I had never in my life met a nicer group of people. They were extremely attentive to all my needs, and without me even asking for it, put me up in their crew room for two days (or however long I needed to be in KL) at no cost. I am not even sure where to begin, but I know that without the incredible generosity

and hospitality accorded to me by all of the Skypark staff, I could not have started on the next leg of my journey. I can certainly say Skypark customer service is way beyond one could ever expect. Thanks, Skypark, you are the best!

While all of this was happening, the Singapore ATC refused to let me fly that leg and asked me to take a much longer land route through Kuching, Malaysia. It still would have been possible for me to go to Kuching, land there, transfer gas from Turtlepac, and fly to Palawan, but the fuel I had would be barely enough. Unfortunately, on the day of my flight to Kuching, I ran into headwinds and ended up using 10 gallons more than expected.

I ended up in Kuching with 10 gallons less fuel than what I needed to make it to Palawan safely. There was no Avgas available in Kuching. I would have to wait until it arrived from Singapore. Avgas, is considered hazardous material and could not be air shipped from Singapore. It could only be shipped in special containers by ship and might take weeks to arrange shipment, costing me lots of money and time waiting in Kuching.



Kuala Lumpur-Palawan, planned (dotted line) vs. route flown

I posted the following blog from Kuching:

Jewel of Borneo, Kuching!

I am in Kuching since last Saturday, waiting and waiting. First, to source some Avgas, which is hard to find here, and then for

my permit to overfly Malaysia and the Philippines for landing at Puerto Princess International, Palawan, Philippines. All this is happening only because one controller in Singapore disrupted all my plans by turning me back to Kuala Lumpur the other day. Otherwise, I probably would have been back in Buffalo by now. My agents at GASE and I are trying hard to resolve this new situation. I am sure we will, but it is taking a lot longer than I thought it would. It is not America; things are very bureaucratic and move much more slowly in this part of the world. I must be patient. Anyway, I would rather be stuck in Kuching, the Land of the Hornbill, than anywhere else. It is the capital of Malaysian Borneo, a beautiful city with very welcoming people.

Just to pass time, I looked at my old emails. I spotted the name of Sam Wong in Kuching. He was a contact of my good friend Phil Thomas, a New Zealander and my Sales Manager for South East Asia during my AirSep days. I had been introduced to Sam by email once but had never met. Without much hope, I sent an email to him. WOW, Sam responded in a matter of hours and came to see me. This young, charismatic gentleman is an extremely successful entrepreneur, a very large real estate developer and, unbeknownst to me, is the son of the owner of Rimbunan Hijau, the 6th largest conglomerate of Malaysia. Rimbunan Hijau is big in oil/gas exploration, timber, and real estate development, owns several helicopters and jets, and is well-known in Borneo aviation circles. In his earlier days, Sam Wong spent years studying in Auckland, New Zealand and Nizhny Novgorod, Russia, as did I, working for months in both places. We had lots to talk about. After connecting with him, I had access to a chauffeur-driven Mercedes to use for my own personal transportation.

I also discovered the Sarawak Flying Club/Global Aero Services of Kuching and made contact with them. The Managing Director and owner is Anand Samuel, a Malaysian of Indian ancestry, an extremely nice gentleman, who took me under his wing and helped me with all my needs. Anand and his two pilots, Mr. Lucas Tan, and Mr. Foster Lawen, were as

great hosts as any I have ever met. They showed me around Kuching, treated me to lunches/dinners and the whole works! Anand even took me to his home to meet his family. Anand's sixteen-year-old son Alfred Raj is an accomplished drummer and wannabe pilot. I, on the other hand, am an accomplished pilot and wannabe drummer! Obviously, we had much in common. All in all, it was a great stay at Kuching.

And now on to Palawan, Philippines:

Sabah Flying Club to the rescue, Kota Kinabalu!

As luck would have it, Sam found out that Sabah Flying Club at Kota Kinabalu uses Avgas, though they were down to the last 20 gallons themselves. They needed to make it last until their next shipment arrived in four weeks. However, upon learning that my flight was a charity flight and how desperate my situation was, the Sabah Club members' committee, with the blessing of President Mr. Leonard Chin, unanimously approved to give me half of their last 20 gallons. It was a great show of support for my mission and for a fellow pilot in need.

My agents had just informed me that I would have the permit to fly to the Philippines today and would be able to depart tomorrow, August 10th. After being stuck here for a week, I was anxious to go, but I would miss the company of these very nice people of Kuching when I left!

The permit I got for the Philippines did not include a provision for me to make another landing in Malaysia after takeoff from Kuching. I needed to land at Kota Kinabalu to pick up ten gallons of gas, so, after takeoff and upon reaching Kota Kinabalu, I declared a fuel emergency. The controllers allowed me to make a tech stop. I will never forget the heartwarming reception accorded to me by all the flying club members when I landed at Kota Kinabalu to take this gas. After listening to my predicament at Kuching and learning what my fuel supply would be, even with the additional ten gallons, they decided to give all of their last 20 gallons. Thank you, Sabah Flying Club, for coming to my rescue!

I landed safely at Palawan, Philippines, and was sure that I would get back home someday somehow and that all the difficulties I faced along the way would turn into good memories after I completed the trip.

My next flight from Palawan to Subic Bay was a domestic flight and had no custom clearance issues to deal with. I already had the permits for my next leg of the flight to Okinawa, Japan. Subic Bay was only a tech stop for refueling. After refueling, I filed an IFR flight plan for Okinawa Japan, got clearance and departed. I reached Okinawa safely. The next leg of my flight was to Osaka. In Japan, foreign aircraft are required to obtain permits even for domestic flights. Ahmed had applied for it in my name already but had not received it yet. After settling down at the hotel in Okinawa, I posted the following blog:

Never-ending need for more permits, waiting at Okinawa, Japan!

Finally, out of Malaysia and past the Philippines, I'm now in Okinawa, waiting for domestic flight permits in Japan. Things are progressing slowly but steadily. I'm hoping to make it back home soon!

But how I got to Okinawa and how I plan to leave; following are some random samples of messages I received while waiting in Kuching (Kuching only had JetA1 fuel) from Eddie Gould and Ahmed Hassan Mohamed.

Here we go:

EDDIE:

"Just look forward now. Here's a what if...what if you had bought an aircraft that uses JetA1 fuel...What if you had added Indonesia and Australia and island hopped to Japan...there are a load of what ifs if you look for them...but none of them help your situation now. Let's concentrate on moving you forward and in the meantime, realize you are in a place you will probably never visit again. Be a tourist. Meet the people and take photos.

Make some good memories out of a poor situation...it will all work out, it always does."

"This is what the Philippine officials sent: "Please expect landing approval for 10th August arrival and 11th August departure for Palawan-Subic Bay-Okinawa." This effectively means that you cannot depart until Thursday the 10th, Making a domestic flight within the country needs two permits and that is what the delay is...but you will definitely depart on the 10th. Please don't ask if you can go to Kota Kinabalu tomorrow as it is not on your Malaysian permit and you haven't got a Philippine permit number to show you leaving the country tomorrow. This is normal for this part of the world. Changes in times and destinations will cause major delays. If we stick to this schedule then it should all go as planned from now on. Kuching will soon be a bad memory."

"If you land somewhere, it is a landing and you have to have permission May be this is not the case in the USA, but this isn't the USA. The main problem with flying around the world is that you go through places where the bureaucracy is a hundred times worse than the weather for delaying flights. Be careful, any messing with the schedule in Japan can cause massive delays. We need to stick completely to the rules and schedules. Otherwise, you will need to brush up on your Japanese"

"By the way, I'm just back from the dentist so not feeling too good. But the plan is... on the 10th, depart for Palawan from Kuching as planned...make a diversion to Kota Kinabalu for fuel, blaming winds. Overnight at Palawan 11th, depart Palawan for Subic Bay, refuel and do Custom clearance and depart for Okinawa. Do you intend to stop in Okinawa one night only? Next flight will be from Okinawa, with a stop at Kagoshima for fuel, and then on to Sapporo. This is where it gets a bit messy. They may let you depart from there to Petropovolsk or you may have to do the short hop from Sapporo to New Chitose to clear Japanese customs. I guess you will be staying overnight (or more?) in Sapporo? Then on to Petropovolsk. So, I need as soon as possible the overnight stops and for how long..."

“Ravi you think it is the Singapore controller caused all your troubles. But the bugger controller has not much to do with anything. It is the CAA that is letting you fly through Malaysia via their permit and, if the permit has a different schedule on it than the one you intend to file, then we may have problems. The controllers, the handlers, the fuel suppliers are not the ones we worry about...it is the bureaucrats who are like god...they are the ones who say you can fly or not, not the controllers. Without the CAA permit, you can't fly...and we need to make sure that you don't mess up the permit we have. Can you understand the need to make that sure first?”

“Just to let you know that the Japanese do not like our choice of airfields because they have a military presence there and the security situation is heightened because of the war of words between Trump and North Korea. But the agents are going to choose the right airports for us based on your range and need for fuel. I'll let you know as soon as they let me know.”

“The first thing I say in my pamphlet is that a pilot can plan for years for a RTW and have everything in place, do all the calculations and know everything off by heart...but as soon as he departs on that first day he needs to throw the plan out of the window because it will change and it will need revising in real time.

A lot of people think a RTW is easy because it is just a lot of one day flights added together...quoting that they do that every day across the USA or Australia or Europe, etc...but you now know how different it is and hopefully can realize that the worst thing about a RTW is the bureaucracy...and then the weather and then any mechanical problems. The mechanical problems can be fixed by the pilot or an engineer, the weather will change soon, but the bureaucrats are in a different league...and almost all do not like General Aviation. You miss out on the battle of words we have with these agencies nearly every day...and with people like the Japanese, you have to be careful as they run their lives on etiquette and one wrong word could mean disaster when applying for a permit, But, we continue the fight to get you moving...all will be known very soon. You will make it

through, we have no doubt about that...just a pain if these hold ups continue."

"Brilliant...touch wood you get the right weather...do not fly if the weather is bad...now we have a permit. It can be revised and it probably has a leeway too...I'm waiting for the actual permit doc, but they sent the number so you can file"

"For flights; Palawan – Subic Bay – Okinawa. Domestic Permit Number 3DF2017439"

"Please be advised that Okinawa landing approval has been confirmed. Departure permit is pending. Please depart from Subic Bay as planned at 0400 UTC and latest 0500 UTC today. Confirmed airport slot upon arrival at Okinawa on Aug 11th at 0900 UTC from Subic Bay; Parking Spot L-12. A customs officer will come into aircraft to check upon your arrival."

"Good morning Ravi. As you know, we are now waiting for the domestic permit that allows you to fly through and make stops in the rest of Japan. The discussions going on in the background are all about what route. Our original choice of Sapporo was denied because it is part military, even though we have used it before. The latest security issues may be blocking semi-military airports for use. I booked your room for one night only because we didn't know how long you will be there, so you need to go and extend your stay with reception. If you have any problems with re-booking, then let me know."

"I am just waiting for some feedback from the agents...but the Japanese do not like to be rushed or pestered for news. So, we will stick to the etiquette and will get there quicker that way."

"In Japan, we have to use a recognized agent. The agent may be based in Tokyo or somewhere else. This agent is who we work with all the time. They then use their people at the different airports. So we don't know the names of the people at each airport, but everything goes through the recognized agent. Trying to find people at each airport causes masses of problems, ask Colin Hales. He decided to do Japan all on his own. Searching for names at each airport and ended up being

stuck in Japan for seven months. Like I say, Japan has to be done properly, using their etiquette and rules. So, whatever you do, do not agree to let someone help you as the agents will be put out because you didn't go through the right channels and then the world will come tumbling down. 72 hours is actually a great result. Colin had seven months in Japan. Norman Surplus was stuck for two years there. So, we will do what the agent says as they are in touch with the CAA and the military. Trying to go another way will not work...you will be going nowhere soon...etiquette is everything in Japan. We must follow all the rules."

"The agent said they would be there to meet you at the aircraft. I always emphasize the need to listen to us because of problems in the past when 'well-meaning' outsiders have offered their support direct to the pilot and the well-meaning support ended up causing more problems. It is a big thing with me to make sure that this is known to pilots because of the major things that have happened to cause problems in the past. So don't worry about thinking I may be over the top about it. It is one of those things that I do because of what has happened in the past and I don't want to see happen ever again. Because you missed out Cairo, you never got my talk at our hangar where we have a commemorative plaque to a father and son who perished in the Pacific after not listening to us but going with advice from an outsider. It hits home a lot better than trying to explain in messages all the time. But we missed that talk and trying to put into messages the importance of some things is not easy to do when trying not to sound like an idiot or grump..."

"Each airport has handlers, or a FBO (Fixed Base Operator). Generally these handlers only deal with the airport they are. So when you are using more than one airport in a country, you will see a number of different handlers. There are many different scenarios for the different countries. For some easy ones, we just call the handler at the airport and it is done. The handler may be the actual airport and the handling is automatic. Sometimes, though, you have to hire an agent who then has to arrange the handling at each airport via whoever is the airport handler. In Egypt, we are the agent but we have to hire Egyptair to do the

handling. Likewise, in Japan we use an agent called NAC-OPS with a person called Kaori as the main contact. He or she is the one doing the talking with the authorities and, as you can imagine, in a place like Japan, it is the authorities who make the decisions. We just have to sit and wait for them to stamp their bits of paper and then send those bits to others to be stamped and then Kaori gets them back and passes them on to us. We then tell you the outcome and Kaori alerts the handlers at the following stops. They make it very complicated when it could be so easy, but this is the rest of the world and each place does things differently and progressively more complicated. So, don't worry, things are in hand. Marvel at the weirdness of where you are. Get in touch with your nephew the US Air Force Major (Karan Bansal), who used to be at Okinawa and see if he still has contact details for people still there. I know the United States Air Force really looked after Norman very well when he arrived in Okinawa."

Both Eddie and Ahmed had been working hard every hour of the day to get me through this journey. Finally, it all worked out. Ahmed got the domestic permit for me to fly to Osaka. Thanks Eddie and Ahmed. You guys rock!

The flight from Okinawa to Osaka, though over the ocean, was mostly trouble-free except for when an avionics component called a transponder began to act very erratic.

The transponder is the avionics component that communicates with ATC radar during flight. When flying IFR (Instrument Flying Rules), a unique code is assigned by ATC to each plane. This code, when entered in the transponder of the plane, acts as an ID tag on each dot (the radar image of the plane) on their screen. ATC then can recognize each plane and communicate with the pilot when needed.

While preparing for the trip, one small thing that I had not thought of was a window shade. Without it, the temperature inside the plane routinely reached 150 degrees Fahrenheit while parked

outside in 110 degree days under the blazing sun (typical at the airports in the Middle East). This caused my avionics keypads to become sticky. In particular, my transponder keypad had been sticky since the Middle East, but today the transponder (Garmin GTX 330) keypad stopped working completely. The only code I could put in is 1200, by pressing the VFR (Visual Flight Rules) key. Foreign aircraft are not allowed to fly VFR in Japan without a special permit (another 72-hour deal). Russia probably has similar rules. So, again, I was stuck with an unforeseen problem.

The only thing I could think of was to call the Garmin Osaka office. Unfortunately, they were closed until Wednesday due to the Japanese holidays. They would probably need the transponder to be sent back to their factory for repair; this would take a minimum of two weeks. Getting a new one from the States is the same time frame - not practical. While pondering my situation, I probably looked pretty desperate. The Noevir mechanic (Noevir Aviation are my handlers in Japan) decided on his own to look through their Avionics shelves, just in case they might have one lying around. As luck would have it, he found an old transponder similar to mine on the shelf. Surprisingly, it was still functional too! I really believe some angels were following me to make sure I get through this journey. I don't know what, but I must have done some good somewhere in my life!

The two Noevir mechanics worked hard to replace my transponder. I now had a loaner transponder installed in my plane to return once I reached home. I was ready for flying to my next destination and communicated with Eddie:

MYSELF: *My blog from yesterday created a lot of buzz on the Cessna advanced aircraft owners pilots/owners club forum. They liked your messages to me! It gives them some idea what it takes to do an RTW!*

EDDIE: *Well, that sounds good...I suppose it shows that we are more than just someone who sends clipped messages with numbers and times, etc, but we try to calm, explain, and come up with plans in real time.*

MYSELF: *That is absolutely what you do!*

EDDIE: *I am probably more vocal than Ahmed, but he does a fantastic job in the background while we are chatting away. We always say that we and the crew are the team...and it certainly works, especially in the places that seem to be hell bent on spoiling the party.*

MYSELF: *Well, I am just fortunate to be able to keep my RTW rolling with GASE's help. I am a wannabe drummer you know, I will certainly beat the drum for GASE whenever I get a chance!*

EDDIE: *I used to be a wannabe guitarist. I knew enough to start a band, played a lunchtime gig at the famous Cavern Club in Liverpool...instead of being cheered, all we could hear was laughing, so we packed it in! Tough audience in Liverpool...but luckily for pilots, I never became a rock star and ended up meeting Ahmed instead and the rest is history.*

MYSELF: *That turned out good for me. OK, time to go to bed for me. I am just too tired!*

My planned route was from Osaka to Sapporo and then to Petropavlesk. I could do these legs within the range of my planes. However, while I was in Japan the tensions on the Korean peninsula flared up due to twitter exchanges between US President Donald Trump and North Korean Dictator Kim Jong-un. Trump referred to Kim Jong-un as 'Rocket Man' and Kim Jong-un reciprocated by calling Trump a 'Dotard,' meaning a mentally senile person. Security in some semi-military airports like Sapporo was increased. Noevir, my handler, told me it would be difficult to get a landing permit at Sapporo and I should instead fly to Aomori, an airport 100 NM south of Sapporo. But flying from Aomori to Petropovolsk now had become longer than the range of my plane. I would need to add another stop in Russia at Khomutovo, requiring a new permit for this additional stop in Russia. Evgeny Kabanov, my agent in Russia was not pleased and insisted:

EVGENY: *Ravi, I will not be able to change your permit quickly. I'm on vacation near Petropovolsk without any internet access. Can you keep Petropovolsk as the only stop in Russia? I can*

arrange for a new permit, but it will take some considerable effort from me.

Having no choice, I waited until Evgeny was able to get the new permit with an additional stop in Russia, costing me time and money for reasons that had nothing to do with me!

I then flew to Aomori and posted my final blog post in Japan the following day:

Aomori, my last stop in Japan!

With the loaner transponder installed, all is now good with the plane. So, last night I filed my flight plan from Osaka to Aomori for this morning. The flight plan has been accepted without modifications by the ATC. The weather, though cloudy, is good enough for me to depart. Other than slight headwinds, the enroute weather forecast is good and I am able to depart Osaka right at my filed time of 10:30 AM.

After a short three hour flight I landed at Aomori, a small farming town in the north of Japan. It is a perfect sunny day and the rice paddies of Aomori, surrounded by lush green rolling hills, look gorgeous. Mr. Kazuhito Shinoda, the Noevir Aviation representative, greets me at the airport. He helps me refuel the plane and my TurtlePac (pretty hard to fill while inside the plane already). Together we drive to the hotel and go out for a very traditional Japanese meal in a local restaurant. It turned out to be a very nice evening, indeed.

Mr. Shinoda brought me back to the airport this morning and helped me get through the customs and immigration checks. This is something previous Earthrounders have had lots of trouble with and I was very concerned about it. But Mr. Shinoda has been very thorough in his preparation of the documentation for me and all goes through without a hitch. He ushers me to the plane, bids me farewell and confirms with ATC that they have my flight plan. With all this done, I am ready to go. ATC clears me to Yuzhno-Sakhalinsk (Khomutovo). I am now number two for take-off behind the JAL flight to Tokyo.

Adios Japan, I am off to Russia!

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RUSSIA – CANADA – UNITED STATES

Coming Full Circle

After landing in Khomutovo, my first order of business was to clear customs and transfer gas from my TurtlePac into the plane. My Russian agent, Evgeny Kabanov, had suggested that I did not need a handler at this location since the airport staff was very friendly and helpful to pilots. Taxiing to the ramp and watching a contingent of maybe ten people in big hats and uniforms coming towards my plane was scary at first, but sure enough, they were very friendly. Russia is a very documentation heavy country. There were at least five documents, with three copies each, that I needed to fill in and sign. Of the ten people, only one, Sasha, spoke English, and he helped with my paperwork. With all the forms filled out and signed, the immigration and customs officers seemed pleased and left me to do whatever I needed to do. For me to be able to transfer fuel from my TurtlePac to the plane, I needed a car brought near the plane so I could connect my 12-volt pump to its cigarette lighter outlet. With no car in sight at the airport ramp, I asked Sasha if it was possible to have any of the service personnel bring a car there. No problem. In two minutes, an airport mechanic with a car showed up and helped me transfer the fuel. We were great at communicating in sign language!

With my plane refueled, I was all set to fly to Petropavlovsk-Kamchatskij in the morning. I took my stuff from the plane and

walked past the immigration/customs officers into the airport terminal to catch a taxi for the hotel. Unfortunately, the taxis would not accept dollars or credit cards, only rubles. Having none, I searched for a currency exchange counter, and not finding one, I asked for help from a gentleman whom I thought might speak English. He spoke English just well enough for us to understand each other. We both looked for the exchange machine or a counter, and finding neither at this airport; he offered to exchange the money himself. He gave me 6000 rubles for a \$100 bill, even slightly more than the official rate.

I was now all set for my stay and took a taxi to the hotel. It seemed like more than a 15-mile drive, but the fare was less than \$10. The hotel was great, and even though I couldn't read the Russian writing on the small Grey Goose bottle of vodka in my room minibar, I took it. So, there I was, sitting in my room by the window, sipping on vodka, watching perfect blue skies with just as good weather forecasted tomorrow for my flight to Petropavlovsk-Kamchatsky. I love Russia and the Russians already!



Transferring fuel from the TurtlePac to my plane in Khomutovo

Flying the Ring of Fire, Petropavlovsk-Kamchatsky to Anchorage, Alaska!

The Kamchatka peninsula is one of the most environmentally sensitive areas in the world. Since Avgas is considered environmentally hazardous, it has never been allowed to be brought into Petropavlsk. As a result, before my arrival, no small piston engine plane had landed there in decades. However, Russia is encouraging general aviation and has recently begun to relax some environmental regulations. Evgeny Kabanov was able to get permission to ship two barrels of Avgas to the ramp. I opened the barrels and checked the gas. It looked fine. None of the staff at the airport spoke much English, but they were extremely friendly. In fact, they did all the work of filling the plane with gas while I took pictures and shook hands.

As I was getting ready to depart, the airport operations manager came by to meet me and wish me bon voyage. He asked me if everything was okay and offered help if I needed anything else done. While chatting, the subject of Avgas came up, and he asked if I had checked the quality of the gas and the expiration dates of the barrels. I told him I had visually checked a sample of the gas, and it looked fine. He insisted I check the expiration dates on the barrels. When I did, I found that these barrels were very old and the usefulness date for the gas had expired over two years ago. I was not sure what I should do. Considering that soon after departing I would be flying over the ocean with no place to make an emergency landing if some mishap happened due to old gas, the operation manager felt I should drain the gas and get newer barrels shipped. However, considering that these were the only two barrels available and that the next batch might not arrive for months, if ever. I decided to take a chance and take off.

The manager asked me to wait, went back to his office, and came back with a liability release form for me to sign. Signing that form would release all airport authorities from any liability in case any mishap happened. I did not even know such a form existed. I had not thought much about the expired gas situation, but with this form in front of me, I suddenly grew more concerned. It created a once in a lifetime life and death decision for me.

The Petropavlsk airport was located in very close proximity to a 12,000 ft high volcano. Per the standard departure procedure, all planes are required to circle the airport until reaching an altitude of 14,000 feet before proceeding to their destination. This gave me a bit of relief as I thought it would take about 15 minutes of flying for my plane to reach 14,000 ft. I would monitor all engine parameters during this time. If something went wrong, I could make an engine-out landing. Otherwise, I would proceed to my destination. That is what I did, but I never really felt comfortable during the 5-hour flight over the ocean, thinking anything could go wrong any time due to the expired gas that I was using. In the end, it all turned out well, but it still gives me nightmares to this day.



Refueling at Petropavlovsk



Koryaksky, 12,000 ft volcano, towering over Petropavlovsk

The natural beauty of Kamchatka is greater than any place on earth I have ever visited. Koryaksky, a 12,000 ft. volcano, towers over the city of Petropavlovsk-Kamchatsky and its airport. The flying path from Kamchatka to Anchorage passes over the Ring of Fire. The Kamchatka Peninsula in Far East Russia is one of the most active volcanic areas in the world. It lies between the Pacific Ocean to the east and the Okhotsk to the west and includes the 10,500-mile-deep Kuril-Kamchatka Trench, where rapid subduction of the Pacific Plate fuels the intense volcanism. Almost all types of volcanic activity are present, from stratovolcanoes to shield volcanoes and Hawaiian-style fissure eruptions.

All the Aleutian Islands have formed due to volcanic eruptions. Over 30 active volcanoes and hundreds of dormant and extinct volcanoes are in two major volcanic belts. It is beautiful but scary, to fly past so many volcanoes!

Since it was my last leg before entering the United States, I needed to clear customs. The closest custom clearing airport in the Aleutian Islands was Cold Bay, 450 miles past the range of my plane. So, I planned to land on my way at Adak to refuel. I must have forgotten about the time change as I reached Adak at 10 PM. Fortunately, there was still a bit of daylight left as the airport runway was not lighted and hard to see. It is hard to imagine someone would ever want to live in such a remote, isolated place.

I had to be careful about fuel management. I departed Petropavlosk for Adak with full tanks. With the tailwinds, I had enough fuel to reach Adak. When the winds died down, I thought I could still make it to Adak and decided to not land and re-fuel at Shemya, also in the Aleutians. But the wind unexpectedly changed to headwinds, at which point, even with the reserve, I had barely enough fuel to reach Adak. I made it to Adak with almost empty tanks. Thinking back, I should have never pushed the limit like that. It could easily have ended up in a tragedy!

I refueled, stayed overnight, and headed off to Cold Bay the next morning. Upon reaching Cold Bay, I was told there was no customs office there anymore, and I must fly to Anchorage to clear customs. I reached Anchorage past 11:00 PM, then waited for an hour for a customs officer to arrive. I cleared customs, parked my plane, and headed to my hotel. It was 1:30 AM when I checked in at the hotel. It was the longest flying day of the entire trip. I was extremely tired, but I did not care. I was back home in the USA and could not be happier. I am fortunate to call the USA my home; it is the home of the FREE. I am free; I no longer needed any permits. I could do whatever I wanted!

Next stop BUFFALO, NY!

EDDIE: *Last day of this amazing challenge...prepare to be celebrated!*

AHMED: *Well done, Ravi ... Congratulations on a true achievement!*

EDDIE: *Congrats Ravi, first class achievement! Now just remember, don't fall in the lake!*

BEING *on the last leg of my RTW, everyone is happy and in a celebratory mood. Jokingly, Eddie asks:*

EDDIE: *Hey Ravi, what was the name of the airport you landed at where you then went on to stand by a statue of someone we both like?*

MYSELF: *(Obviously, I knew he meant the Beatles and Liverpool!) That was U-Tapao.*

EDDIE: *Are you sure? Yeah yeah yeah? Early on in the flight...4 guys who we both like?*

MYSELF: *Oh sorry, you mean Liverpool! I was just kidding. So, you know, this RTW completely fried my brains. I can't think or remember anything! Anyways, News media including a local CBS channel will be at Buffalo when I arrive! I gave them arrival 4:00 PM local time. I'll depart Ft. McMurray at 7:30 AM.*

EDDIE: *Yes, tomorrow will be an amazing day for you and you deserve all the plaudits coming to you. I bet you are getting fed up of looking at trees.*

MYSELF: *I am looking at clouds only. I only looked at trees and lakes the last time I flew this route.*

EDDIE: *Never mind. You will be able to spend some days looking up at the clouds after tomorrow, and then you'll be working out where to go next! They all do, you know.*

MYSELF: *I will concentrate on my drums, golf, and drinks!*

EDDIE: *We will see! Not far to go now.*

MYSELF: *I am hoping to make Buffalo by 4:30 Local. After landing, friends have arranged a cruise around the Buffalo waterfront and a party on a Miss Buffalo boat at 6:00. Don't want to miss that one!*

EDDIE: *Does that go under the falls?*

MYSELF: *No, only around the Buffalo water front on Lake Erie. It stays above the falls, I hope.*

EDDIE: *Great stuff...I need to see the photos from the party on the boat. No falling overboard please! Now that would be a record, first man to go solo around the world and go over Niagara Falls in a gumby suit all in one day!*

MYSELF: *Let me think about it. I do have the survival suit. If only I can just find a barrel on the boat!*

EDDIE: *If you finish off a barrel of ale then you have the Dutch courage and a barrel to complete your task.*

MYSELF: *Let us see what happens! I'll be home in 2.5 hours! I could not have done this without you and Ahmed. THANK YOU, THANK YOU, both of you.*

Doug Goodrich my airplane mechanic had also been an important part of this journey from the start, I texted him:

MYSELF: *Doug, I'll be home in 2.5 hours. Thanks to you, my plane ran perfectly! I did it! Thank-you!*

DOUG: *Fantastic! Nice job. Welcome home!*

EDDIE: *Enjoy your arrival and leave the worrying to us!*

MYSELF: *You been great. Thanks again!*

EDDIE: *No need for thanks...I know I have enjoyed the adventure, too...you have been patient and understanding... not all pilots are such good people to work with! One thing you can do when you have time and internet, is to go through the posts about you on our page. There are loads of comments that are addressed to you. I have answered some and liked others, but people think you are GASE or something!*

MYSELF: *Will do.*

EDDIE: *Just wondering...Did you wear the gumby suit for these lake crossings?*

MYSELF: *Are you kidding? I haven't worn it since Adak! I was sick of it!*

EDDIE: *That seems to be the feeling of all our RTW's. But handy to have just in case. I bet you are feeling excited now...and maybe a bit tired...*

MYSELF: *Very excited and very tired! It's more of a relief than anything else.*

EDDIE: *You will be fine. Was the weather clear over that area of Canada that seemed to have a million lakes?*

MYSELF: *Weather is perfect. Sunny skies. Clear but very hazy! I'm going right through the center of Toronto International!*

EDDIE: *I just saw that coming up on the tracker—you are almost done crossing Canada and then home. Well Ravi, it's been a pleasure. The circle is almost closed.*

MYSELF: *OK, bye for now. It is getting very busy.*

EDDIE: *Memories for life have been made. Rest easy and enjoy your evening. It will get busy soon so, in case you have to concentrate on other stuff, I will wish you....congratulations and a very happy landing. Catch up with you soon...tomorrow or after ...enjoy!*

MYSELF: *Yup. Thanks!*

EDDIE: *Bye for now!*

After I returned home, I posted my final report on my blog:

Dream fulfilled, back home, Buffalo, NY!

It has been a dream of mine for years to make this round-the-world trip. I am finding it hard to believe that I have done it and have returned home safely. I have lots of people to thank for helping me fulfill my dream. First and foremost, is the unflinching support of my family, my wife Pratibha, my sons Rohan and Nitin, my brothers, sister, and their families, my logistics team, Eddie Gould and Ahmed Hassan of GASE, my friends in Buffalo, and the new ones I made along the way, and, most of all, God Almighty who watched over me through this entire journey. Thank you, thank you, and thank you all for helping make my dream come true. I love you all very much.

No more flying for me for a while, got to catch up on drumming, golfing, and drinking!



Return to Buffalo-Homecoming Reception (Aug. 20, 2017)

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RETURN TO AMBALA

Mission Accomplished

Pratibha and I returned to Ambala in April of 2018. By then, much of what I had set out to do had been accomplished: I had completed my round-the-world solo flight on August 20, 2017, becoming the first person of Indian origin to have done so. The media coverage I received had helped in raising awareness for the importance of self-exams and early detection of cancer in the community. It even motivated Ambala Rotaracts (younger members of Rotary clubs) to get involved in promoting cancer awareness. They now regularly make PowerPoint presentations in area schools about cancer awareness.

MRI Machine

I was able to raise over \$200,000 worth of donations toward the purchase of the MRI machine for the Rotary Ambala Cancer and General Hospital. The Mr. Tara Chand Gupta Trust of San Francisco contributed the balance. During the flight, it was amazing to watch donations pouring in from around the world. Even children got involved. Here is a post from my Facebook page timeline:

These kids. ❤️💙❤️

Cancer has broken their little hearts more than once when they lost both of their Grandpas to the disease. Today they collected bottles/cans, coins, did some extra chores, and got a little help from Aunt Delsie....resulting in \$53.02 to donate to the MRI machine at the Rotary Ambala Cancer & General Hospital in Ambala, India. They even used sidewalk chalk to make a little message to send to Ravi to encourage him on his flight around the world...

“Go Ravi, Go!”, from Cassidy, Tristen, and Kady 🚫🌍✈️



My youngest donors

On the day of our return flight, Pratibha and I decided to visit the hospital one last time before our departure. Coincidentally, the new MRI machine had just been delivered an hour earlier! Mr. Surjit Singh, the Siemens project manager supervising the installation, did not even know who we were, but once he learned, he presented us flowers as a token of his appreciation for our support of the project. We really felt honored and humbled!



Pratibha and me at the installation of the MRI machine

The MRI machine has now been installed and is in operation at the hospital. At present, the MRI machine along with a CT scanner is serving the needs of about 100 patients every day.

Sneh-Sparsh

Sneh-Sparsh (Touch of Love), the free, at-home aftercare program for low-income terminal cancer patients we initiated, is continuing to grow. It has benefited hundreds of cancer patients. Realizing the relevance of Sneh-Sparsh, the community has also deeply involved itself with its activities now and is donating enough funds regularly to make its operation self-sufficient.

Future Goals for the Hospital

The next goal for the hospital is to establish a radiation oncology department with all the equipment necessary to make the hospital a top-notch center for the treatment of cancer.

The marketing and promotions done before embarking on the journey worked well. News media from around the world, especially India, covered my flight extensively. Consequently, the Rotary Ambala Cancer and General Hospital received well-deserved publicity, hopefully widening its donor base to include patrons worldwide. Moreover, the recognition and publicity I personally received has resulted in regular invitations to give talks

at schools, pilot organizations, and Rotary Clubs. I am thus able to continue my campaign to help the hospital.

Reception at Ambala Air Force Base



Air Force Base reception/tour (April 23, 2018)

The highlight of my RTW trip was when I was given permission to land in Ambala on the tarmac of the Indian Air Force base, a rare moment for a civilian pilot. Now that I was just visiting family in Ambala after completion of my RTW, I was invited by Commander L. K. Chawla to visit the Ambala Air Force base again to meet and speak to the Air Force staff and pilots based there. Never having gotten closer than within half a mile of the fenced-in periphery of the Air Force base while attending school in Ambala, it was

unimaginable to me that fifty-five years later, as an adult, I would be invited to visit the base as a VIP guest of Air Officer Commanding.

Commander Lalit Kumar Chawla personally greeted us at the base and even allowed me to make a presentation about my RTW to all the pilots, officers, and staff. The four-hour visit was truly a once-in-a-lifetime experience. I was given a tour of the base, provided the opportunity to sit in the cockpit of a MIG fighter plane, and given a demo of how to fly the MIG in the simulator used to train Indian Air Force pilots. That kid who still lived inside me – the one who'd spent all those afternoons skipping school and riding his bike to the Air Force base to watch the planes taking off and landing from the other side of the fence – couldn't believe his luck!

Meeting with Mrs. Sushma Swaraj, Minister of External Affairs of India



With Mrs. Sushma Swaraj, Minister of External Affairs of India

I was invited to make a presentation about my flight around the world to Mrs. Sushma Swaraj, Minister of External Affairs of India. This position is equivalent to the US Secretary of State. Mrs. Swaraj personally received my family and me in her office and gave over two hours of her time, chatting and watching my presentation. This great leader of masses, an epitome of simplicity and high moral values, took a keen interest in knowing even the most

minute details of the flight and very generously appreciated my grit, determination, and empathy towards other people. Turning towards Pratibha, my wife, she asked, how did you allow this crazy guy to undertake such a risky mission? Pratibha said nothing but just smiled.

Never before in my life have I felt so honored and privileged in the company of people of my own origin and family. Words fail me to express my feelings of gratitude and indebtedness towards Commander Chawla and Mrs. Sushma Swaraj. I will never forget these two days. These are forever etched deep in my heart and mind. I kept wondering to myself how life is both fragile and finite, full of danger and wonder, and how living life to the fullest -- and making a positive difference in the world -- requires you to take risks. Success rarely comes on the first try, but if you're willing to learn from failure, this can help you move forward. I've always told my sons: Never doubt your ability to succeed. Dream big, be persistent, work hard, work smart, follow your passion, and stay true to yourself. Success is sure to come!

The Inherent Goodness of Others

Of course, it's also true that I could never have completed my solo around the world flight -- and raised so much money for such a good cause -- on my own. It took the support of many people to make my fight such a success. Some of those people were near and dear to me, such as my wife Pratibha, and my sons, Rohan and Nitin. Others, such as Eddie and Ahmed of my logistics support team, were people who I never met in person but who I got to know through their many texts and emails along the way.

I had begun my journey two weeks after attending the Rotary International Convention in Atlanta. I was able to meet up with some of the Rotarians I had met in Atlanta during my stops in their countries. They helped arrange my talks at their respective clubs and collected funds in Italy, India, and Thailand.

Most pilots planning to do an RTW flight without having traveled much internationally, are concerned about what kind of people they might meet along the way. I can say with absolute certainty

that all people around the world, no matter what ethnicity or religion, are extremely kind, helpful, and hospitable. I personally have traveled the world for business and pleasure for the past 40 years and have yet to come across one person who was not nice. In fact, even during my RTW, I experienced many random acts of kindness from complete strangers. Without their help, my RTW would have been much more difficult to complete.

There is one person who I want to especially thank - my father, who told me all those years ago that, if I just tried hard enough, I could be successful. I think of his dedication to the poor - all those days he made the dusty trek up and down the pebbly mountain passages of Kasauli to see his neediest patients - and know that at least some of that goodness must have rubbed off on me. Although my path was high in the sky, ultimately, my father and I were trying to do the same thing: To ease the suffering and promote the health of our fellow citizens.

