Antarctic Reflections (1986 – 1994)

On October 4, 1986, the 29th anniversary of the launch of Sputnik 1, NASA Mike Comberiate called me and asked if I would volunteer my time in exchange for travel expenses to repair the South Pole Satellite Data Link (SPSDL). One man had backed out, and the project needed someone familiar with satellite communications to work on the system. That was exactly what I wanted to hear! My employer, Lockheed, allowed me to use my vacation time to take advantage of this "Once-in-a-lifetime" opportunity. Even though I work for Lockheed, I was more of a representative of NASA. However, I liked to say that I was a Lockheed engineer flying on a Lockheed-built aircraft (the C-130).

On the first trip, I stopped in Los Angeles prior to boarding the flight to New Zealand. While waiting for my commercial flights to Christchurch, New Zealand, I visited Howard Hughes's Spruce Goose in Long Beach. Quite an airplane! In Christchurch, the Antarctica clothing is issued and stuffed in two orange canvas bags. One bag contains the Emergency Cold Weather (ECW) gear, which is considered hand-carry, and the other bag is loaded onto the pallets. Prior to leaving Christchurch, all personnel and bags are lined up and intimidated by drug searching dogs. We then board either a LC-130 aircraft (the "L" indicates that the C-130's are ski-equipped) flown by the superb US Navy Squadron VXE-6, or a standard C-130 flown by the New Zealand Air Force. Sometimes people fly down to the Ice on C-141's or C-5's (also built by Lockheed), and have only a five-hour flight, but all my flights have been on the C-130's, which typically take eight hours from Christchurch to McMurdo, Antarctica. My fastest time took only six-and-a-half hours, flown by a woman Navy pilot. In this story, the terms LC-130 and C-130 may be used interchangeably. On one of my flights, I was allowed to sit in the pilot's seat. I told him that since I could fly a C-172, I could fly a C-130, since it was 42 model numbers less than what I flew. He grinned, and responded, "It's all the same: you pull on the stick to make the houses get small, and push on it to make the houses get bigger!"

Navy Squadron VXE-6 LC-130, call sign X-ray Delta-04, at South Pole.

Once airborne, people take photographs, sleep or read. On my first trip, the loadmaster read The Bible. While the C-130 droning engines are much nosier than a commercial jet, in some ways it is more comfortable (if you leave the red web fold-down seats) because there is more room to move around, and one can usually find a spot on one of the pallets to stretch out. The flight crews usually allow the passengers to go into the cockpit. Rubber chicken on the airlines can't compare with the excellent box lunches provided by the US Navy.

About halfway into the flight is a GO – NO GO point, at which time the pilot makes a decision whether to keep flying towards McMurdo, or boomerang - turn around and go back, if the weather conditions are too bad in McMurdo. Fortunately, all my flights went straight to McMurdo, but I have heard many stories of people having to turn around, only to try it the next day. Sometimes, they are within a half hour of landing and are forced to return due to sudden whiteout conditions. Also, as I recall, the sea ice is visible near the halfway point. Closer to McMurdo, while flying at an altitude of 30,000 feet or so, one can see spectacular view of breaking sea ice patterns, deep-blue water, rugged snow-covered mountains, and ancient glaciers flowing between the ranges.

During this time of the year, the temperatures in New Zealand are generally about 75^{o} F. Landing in McMurdo, the -10^{o} F. temperature rather abruptly attracts one's attention, especially when the flight crew opens the tail ramp door while we are still taxiing. After landing on the sea ice near Ross Island (where the US Station McMurdo actually is located), the view of Mt. Erebus with white smoke drifting out of its top is utterly breathtaking. The clear air makes the 13,000-foot volcano seem much closer than 25 miles. More sobering is the knowledge that this is the same mountain an Air New Zealand DC-10 aircraft crashed into in 1979.

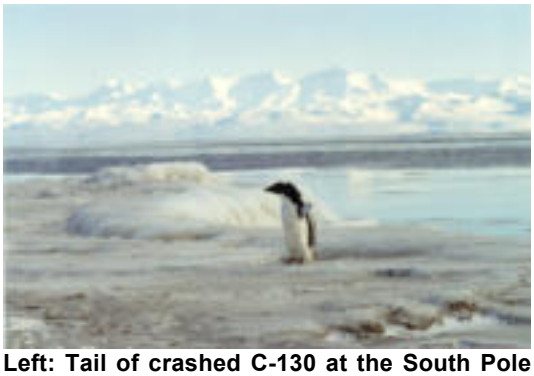
Every time that I've traveled to Antarctica, I had heard about the satellite ground terminal on Black Island. To go to the island, one must travel either in a helicopter or by a land transverse that can last twenty hours in a smelly diesel-fueled Sprite. For the first time in six trips, I had an opportunity to fly Black Island. During the twenty-minute helicopter ride, we flew over the Pegasus Site, where a Super-Constellation C-121 aircraft had crashed years earlier. One can never forget that despite all of its beauty, Antarctica can still be inhospitable. It's a harsh continent.

Many of the people who go to McMurdo never leave the immediate vicinity. However, being a team member working on the South Pole Satellite Data Link provides me the best excuse for hopping aboard another C-130 and heading for the "Top of the World" (it all depends upon one's view!). The flight normally takes three hours. In 1986 we were halfway to the Pole when the nose ski came down during flight and could not be retracted, so we turned around, went back to McMurdo, waited a few more hours, and then departed once again, finally arriving at the Pole at 4 AM local time. Flying over the Beardmore Glacier and the Trans-Antarctic Mountains is absolutely spectacular! There is an excitement just knowing that you are actually flying to the South Pole. Upon arrival, I told myself that I, Matt Nelson, was really here. Every day of every trip to the Pole I would go outside and spend some time just thinking how fortunate I was to be there.

Two signs along the 14,000-foot ice runway welcome the planes with a touch of humor. The first says, "JP-4, Food, Lodging, Next Exit"; the second is more to the point: "Planes with Mail (an arrow points to the right), without (an arrow points straight ahead)". In other words, if you don't have mail, you might as well head back for home.

Contrasting against the white snow, the colorful, fluttering flags of Argentina, Australia, Belgium, Chile, The French Republic, Japan, New Zealand, Norway, The Union of South Africa, the USSR (now Russia, with its new flag of white, blue, and red, as opposed to the yellow hammer and sickle over the red background), Great Britain, and the United States are the first sights seen upon leaving the plane. These flags represent the twelve nations that originally signed the Antarctic Treaty, which says the Continent would be used for scientific and peaceful purposes, are arranged in a semi-circle around a red-and-white barber pole with a chrome dome, which signifies the ceremonial South Pole.

In the early Seventies, a C-130 crashed during take-off at the end of the ice runway due to an electrical failure. It was damaged beyond repair, and left for the drifting snow to cover up all but eight feet of the vertical stabilizer. Now it is a landmark for the incoming planes. This plane is a favorite tourist attraction at the Pole. Leading down to the cockpit escape hatch is a vertical shaft through a five-foot thickness of snow. We crawled down inside it, and I sat where the pilot would have sat had a seat still been in place. Being a ghost pilot was kind of spooky!



Left: Tail of crashed C-130 at the South Pole
Upper: You can't have a story about Antarctica without having at least one penguin photograph.

At the South Pole, one wouldn't expect to find anything related to the Space Shuttle. However, on the opposite end of the runway are two triangle-shaped radar corner-reflectors. They were installed several years ago to provide radar targets to the Space Shuttle in case the Pole was selected as an emergency landing site for launches out of Vandenberg AFB in California. Since the Challenger accident in 1986, shuttle launches only occur from Kennedy Space Center, Florida, eliminating the need for the reflectors, since these missions do not fly over the Poles. Mounted on the wall inside the communications room is a photo that I took down there (wish I could say I actually was the photographer) from the STS-51L mission showing the shuttle's Ku-Band Radar and Communications antenna, which I work on in Houston. There are also some various shuttle mission decals along a wooden beam that says, "South Pole Communications". Upstairs, in the game room/library, and representing current and future space exploration, the mission patch and an American flag flown on the STS-9 mission are framed and mounted. STS-9 crewmember Owen Garriot donated these last two items. In 1992, while I was at the Pole, Navy astronauts Steve Oswald and Bill Readdy flew on STS-42, and I took photos of their mission patch at the South Pole sign.

Me at the South Pole with VP-94 and "Fly Navy" decals, 1991

December 14, 1988, the 77th anniversary of the discovery of the South Pole by Roald Amundsen, I walked to the sign located at the Geographic South Pole, ate some snow, and filled up several 35mm film canisters with snow, to bring home as gifts. This same year, the Amundsen-Scott South Pole Station welcomed the visiting team of the New York Air National Guard to play in the first annual Ice (Cream?) Bowl. In the States, the football games are often played in domes. Since the South Pole dome isn't large enough to play indoor football, the entire community endured the cold to watch the NYANG lose (so they thought). Flags of twelve nations

served as the goal line. With the engines of their two C-130's going round-and-round, the NYANG pilots had the best view watching their team absolutely cream the South Pole "Beakers". Like most visiting teams, they soon flew away. Their victory "Top Gun" formation flyover created a nice air show with those ugly old Hercs.

NY Air National Guard LC-130 flying over flags at the South Pole

Twin LC-130's in formation over the South Pole

On one trip leaving the Pole I had an additional delay, because the plane I was initially scheduled to leave on had hazardous material on board – I was bumped because of two snowmobiles! This particular LC-130 actually had crashed a few years before at some other location in Antarctica. The National Science Foundation calculated it would be cheaper to repair this plane than buy a new one. New engines were installed at the crash site, and the plane was brought back to an operational status. About a week before I arrived on the Ice, at a remote field site, another plane had a propeller shear off and tear a hole in the fuselage during taking off. Within two or three weeks, highly skilled Navy personnel repaired it under very cold and adverse conditions. While I was at the Pole, this plane was flown back to McMurdo.

Sooner or later, there comes a time when the plane with your name on the manifest lands to take you back to McMurdo. For me, all flights between the South Pole and McMurdo are adventures. On the first trip, the friction between the skis of the LC-130 and the ice prevented the plane from going airborne, so all the passengers were instructed to go to the back of the plane in order to change the center of gravity. We stood on the cargo ramp without wearing any safety belts. After taxiing for several thousand feet, the plane finally broke the friction bonds and we were airborne. Once is enough for that kind of experience!

Can you imagine the aircrew of any U. S. airlines inviting you to ride inside the cockpit while flying over the Rocky Mountains? On three occasions, the pilots allowed me to be inside the cockpit for most of the flight. Flying over the Trans-Antarctic Mountains, we could see the ruggedness of the peaks and the rivers of glaciers. The glaciers look menacing with their multitude of crevasses, and their rugged beauty never ceases to amaze me. Because the air is so clear, the peaks of the mountains seem much to close for comfort, but the altimeter tells me we are 10,000 feet above them. Because of the variations of the magnetic compass, Inertial Guidance is used. (GPS is being phased in.) Instead of flying a North heading on the compass, a course setting of 167^{o} is followed. It seems strange to be heading North with those numbers, but the lady navigators know exactly what they are doing. I remember that on one of the flights we flew at 31,000 feet with a true airspeed of 275 knots. Once I was permitted to remain in the cockpit during landing, sitting on the jumpseat with a majestic view of Mt. Erebus.

Antarctica is remote, cold, and unforgiving of human error. People who go there have the same spirit as those who will settle space. Conditions may be rough, but those hardships are worth enduring for the chance to travel to places most people will never have the opportunity to go and see. While I have future goals to travel back to Antarctica, if I never return, my life has been enriched by that enchanting Continent and the modern day explorers who give an insight to what the early pioneers were like. Certainly, the experiences I have been given will remain with me for life. The vastness of the ice and snow, the crystal-clear blue skies, the glaciers, penguins and whales and seals, and the stark beauty of the Continent have extracted the magnetism from the South Magnetic Pole to keep drawing me back there as if I were an iron particle. As much as I

desire to travel to other places in the world, Antarctica and I have a bond with each other that I can't nor want to release.

Launch of Soyuz TM-15 and Tour of Soviet/Russian Space Facilities (1992)

Shrouded in secrecy, the mystic of the Soviet space program enchanted me ever since the launch of Sputnik 1 on October 4, 1957, when I was eleven years old. Forty-two years later, I still remember the fear of Soviet/Russian dominance of space that swept the country during the early years of the space race. The Soviets continued to dazzle Americans by their launches of Yuri Gagarin, Valentina Tereshkova, and the first man to walk in space, Alexei Leonov. They angered us by shooting down the Lockheed-built U2, the spy plane flown by Francis Gary Powers. Proudly, we at last beat the Russians to the moon on the Apollo 11 mission, with Neil Armstrong and Buzz Aldrin "flying" the American Flag on the first planetary body other than Earth.

The day I read an advertisement in Aviation Week and Space Technology seeking people to travel to the Baikonur Cosmodrone in Kazakhstan to watch the launch of Commander Anatoly Solovyev, Flight Engineer Sergei Avdeiev, and guest cosmonaut Michel Tognini (French) on Soyuz TM-15 on 27 July 1992 is the day I realized that I could witness the mother lode of Soviet space program if I spent money for the tour. It was expensive, but well worth every cent.

Our group of Space Nuts met at the Finnair counter at the JFK airport in New York on 22 July 1992. It was easy to spot the others - cameras, space lapel pins, talk of moon rockets, starry eyes! We were the one that Normal People didn't want to sit next to on Flight 102 to Helsinki, Finland. Calling our group "Space Nuts" is a modest statement. Except, we were not modest - all of us had passed through the Space Nut Galaxy a long time ago. It could be argued that a "Space Nut" is someone who has an interest in space, but otherwise may live in the proximity of the "Normal Zone". Not us! It was as if the Solar Winds stole from our space consciousness particles of Cosmic Dust, remnants of the Big Bang, flushed Normalcy down a Black Hole, and coagulated into a vibrant, pulsating quasar of space energy at the JFK Airport.

In Helsinki we had a change of planes. Thoughts of what happened to KAL Flight 007 surfaced as our Finnair flight entered Soviet - ah, Russian - airspace. Of course, I didn't have any desire to be shot down, but in some bizarre manner, felt somewhat disappointed when no MiG's appeared off of our wing. Unlike other international airports I have flown into, Moscow's Sheremetyevo Airport had no other air traffic in sight when we landed.

We did the usual tourist stuff of seeing Red Square, the Kremlin, and St. Basil's Cathedral. I was really impressed by the Christian artwork inside St. Basil's Cathedral.

St. Basil's Cathedral and Christian Holy Family painting inside

Prior to the Space Age, the Golden Age of Aviation thrived. Every bit as impressive as the Smithsonian's Paul Garber facility for the restoration of vintage airplanes, but far less glamorous, is the Monino Air Museum outside of Moscow. This place was fantastic!

Bottom: Combination airplane and helicopter
Right: Wreckage of the U-2 shot down,
May 1, 1960

Apparently, we were not expected, because the director acted surprised to see us. After a discussion that included a bribe by Dennis Pivnyvk (our interpreter and also, the son of a very high ranking Russian space official) the director agreed to show us around. Young Russian soldiers eyed us with curiosity. Just in case we weren't allowed entry, I snapped a photo of a gigantic aircraft that was a combination of airplane and helicopter.

Outside, there were planes of every description. The most awesome looking plane was the Cu-100. It is built of Titanium, and was designed to carry two Hydrogen bombs. Only four were ever built. Inside another hanger was a plane that very much looked liked the Wright Flyer.

Cu-100 (or Cy-100)

Looks similar to American Wright Flyer

In the third room of the museum I received one of the most memorable experiences of the trip. Two actual pieces of the Lockheed-built U-2 flown by Gary Powers and shot down by the Soviets on May 1, 1960 were displayed on a table. It never had occurred to me in my life that I would see this wreckage, let alone touch it. From what I understand, Powers had flown over Baikonur on that eventful day that became one of the cornerstones of the Cold War.

Outside, a Bear bomber with four engines and two counter-rotating props on each engine looked menacing just sitting on the ground.

Bear at Monino Air Museum

Is that an A-3 intercepting the Bear?

The vehicle that fascinated me was the MIG-105 EPOS (Experimental Passenger Orbital Spacecraft). It was about twenty feet long and looked like a small space shuttle.

MIG-105 EPOS (Experimental Passenger Orbital Aircraft)

"It was one of Russia's shuttle designs in the 1970s, canceled -- but then subscale models were flown into orbit in the early 1980s as technology development for the Buran. See http://www.friends-partners.org/~mwade/spaceflt.htm for more details." Email from Jim Oberg, expert on the Soviet space program.

Our final words from the museum director, a former World War II combat veteran, were a prelude to what we would hear many times during the other tours of the Russian/Soviet

aerospace facilities: “May you have blue skies and now let us talk about peace and friendship and forget about all these combat planes.” This was definitely a day to remember.

The next day we were taken to another one of Moscow’s four airports (which was the one used by Presidents Boris Yeltsin and Mikhail Gorbachev) to board an Aeroflot Tu-134 jet, tail number CCP-65719, for our flight to Leninsk, which is the city outside of Baikonur. This aircraft still had the hammer and sickle flag painted on its tail section. The Tu-134 is built similar to a DC-9, only it has two seats on each side of the aisle, as opposed to the two and three seat configuration of the DC-9. The first class cabin was quite luxurious with its polished wooden panels and captain-style chairs. Typically, though, I was seated in the second-class cabin, which had a slight fishy smell. Prior to takeoff, “Je kypumb” and “3acmezHymb phMhu” signs for No Smoking and Fasten Seat Belts illuminated. (Of course, the Cyrillic alphabet is somewhat differently written than the English letters.)

During the three-hour flight to Leninsk, which is East of the Aral Sea, we were told not to take photographs from the plane. Our meal of filet of chicken and chicken-fried potatoes, decorated with toothpicks shaped like swords, was one of the best meals I have ever eaten on board a plane. About an hour out of Moscow, we flew over what I think is a defensive zone, sort of a No Man’s land. Clearly visible was a road that seemed to form an outer perimeter, running between two barber-wired fences, which were separated by perhaps 100 meters. Enroute to Leninsk, some of the people were fortunate enough to go into the cockpit and sit in the co-pilot’s or navigator’s seats. Beneath the navigator’s seat was a Plexiglas dome which one could clearly look downward. Just as my turn arrived, we were instructed to take our seats for landing at Leninsk. I could not believe that I was actually landing near Baikonur for the purpose of witnessing the launch of Soyuz TM-15.

Russian space shuttle – the Buran

Launch of Soyuz TM-15, July 27, 1992

Bhutan

While Wintering-over in McMurdo, Antarctica in 1996, I decided that when I left the ice I would travel to Bhutan. Antarctica is isolated, but the Internet has long fingers. By the first of August, I had made e-mail contact with Christopher Post, the United States representative of Yod Sel Tours and Treks Ltd., whose office is in Bhutan's capitol of Thimphu.

There were no planes in or out of McMurdo for six months. During the last week of August, three flights came in at WinFly. Among the many items of mail that I received was a visa application for Bhutan, which left on the next flight out a couple of days later. When the main body of flights began on October 1st, I received confirmation of an approved visa.

Finally, on November 1st, I left the Ice. After enjoying the green trees and fresh fruit and flying over Mt. Cook and traveling around New Zealand's South Island for a week, I departed on an Air New Zealand flight to Bangkok, Thailand, with an hour stopover in Brisbane, Australia, on November 9th. After over-nighting in Bangkok, I departed to Paro, Bhutan on Druk Air, Royal Bhutan Airlines. The first hop was to Calcutta, India. Enroute to Calcutta, I sat on the right side of the plane, next to a window. A small, brilliantly colored circular rainbow about the size of a quarter flickered off the back of the seat in front of me. For most of this flight segment, I cupped the rainbow in my hands, which gave me a spiritual feeling, so intense that I ignored the sun glimmering off the rice paddies 30,000 feet below and declined the airline food so as not to lose the rainbow dancing in my palms.

In Calcutta I stayed on board, and moved to the left side for a better view of the Himalayan Mountains, which I knew would be visible from that side during the flight to Paro. While waiting for the next group of passengers to board, the plane's Captain, George DeSerres, walked down the aisle and greeted the people already seated. He stopped and chatted with me a few minutes. While in Antarctica, I read a travel story about Bhutan. In the article, the author made mention of Captain George. So I told him that I had read about him in the magazine. We talked about flying in Bhutan, and he told me that he was only one of twelve pilots checked out to fly into Paro. I told him that I was a private pilot and asked him if there were any opportunities for private pilots to fly into Bhutan, and he told me no. Just before he went back into the cockpit, he said he would have me come up for a little while. A few minutes later, the flight engineer came back to me and said I was invited into the cockpit. I thought I would be up there just a few minutes, but must admit it was a pleasant surprise to be allowed to fly on the jump seat all the way from engine start in Calcutta to engine stop in Paro, with Captain George pointing out Mt. Everest and some of the other 8000-meter mountains in the Himalayan Range. I listened on a spare headset as he talked with the Indian flight controllers.

Druk Air BAE-146 at Paro, Bhutan

Just prior to landing in Paro, George told the passengers that the landing would be somewhat different than what they normally experienced. He said, "Don't be alarmed at the close

proximity of the trees and mountains as we spiral our way in," or similar words, grinning at me as he made this announcement to the passengers. As a pilot, I am used to flying the pattern for landings. You fly parallel to the landing strip, and then make two distinct right or left turns (depending upon whether you are flying right or left pattern), and then fly approach onto the runway. Generally, there isn't a mountain blocking the final. So we flew around the mountain, and then George expertly slipped the British-built BAe 146-100 jet to align his approach. This was the most spectacular landing I have ever witnessed! Welcome to Paro, Bhutan. A month later, a friend asked me what airline was my favorite. Without hesitation, I responded, "Druk Air."

Above: Tiger's Nest Monastery
Other photos are of Bhutanese people

Outside of Kathmandu, Nepal

After touring around Bhutan I traveled to Kathmandu, Nepal, and from there went to New Delhi, India. In New Delhi, I hired a driver to take me to the Taj Mahal.

Taj Mahal

Stonehenge, 1996

Mongolia

Christmas Day, 1999

Last August, when I made my reservations to travel with Boojum Expeditions (www.boojum.com) out of Bozeman, Montana, to Western Mongolia and spend New Year's Eve with Kazakh Eagle Hunters, the idea of leaving on Christmas Day, while unpleasant, didn't seem as hard as the reality of leaving my family when this day actually came. What kind of low life leaves his family on Christmas Day? We had all discussed it, and even earlier this week I told Karoline and Michelle and Cheri that if they were really upset with me going I would forego the trip. The trip had been paid for by the end of October, and my airline reservations were all set. They all told me to go, but all the State Department warnings about possible terrorism acts had them understandably upset. I had tried to leave later, but unfortunately, in order to make my connections with Mongolian Miat Airlines to fly from Ulaan Baatar, the capital city, to Ulgii, I could not leave later than Christmas Day. I stayed up packing until 2 AM on Christmas morning, then with a heavy heart, departed the house about 5:30 AM to Houston's Ellington Field, where I parked my truck and caught a taxi to the big airport for an 8 AM departure on United Airlines to San Francisco.

From the San Francisco airport, I called Karoline, Michelle, and Cheri, as well as Mom and my sister Karen. I gave another call to my friend Hawks Abbott. With my spirits lighter, I boarded the long flight to Tokyo. This time I sat on the right side of the plane, and had a good view of the Golden Gate Bridge. I can never see that bridge without thinking of the time that I sailed under it at midnight upon my return from Japan and my Army honorable discharge fresh in hand, on the USS Fred Morris, in April, 1969.

As we flew Northward, we followed the California shoreline, where the foamy white breakers of the oceans danced under the rugged cliffs, sometimes the water a deep blue, other times it was greenish, at all times delightful. Off to the East Mt. Shasta rose from the clouds, then Mt. Hood made its majestic appearance. As the flight continued, I dozed, only to awake to find that my window had been closed. It is important that the lousy movies must be easily seen by all the passengers, forget that the window seats offer a more spectacular view. I can't stand to have them closed, so since the guy behind me was sleeping, and I was setting on an exit row with nobody immediately in front of me, I half opened my two windows, and shoved a pillow at the window between my seat and the one behind me. Later, I went to the restroom at the back of the plane. Walking back to my seat, I could see that the only windows open on the entire plane were mine. I felt triumph in my rebellion.

Ice floe (looks like a bird) and volcano as seen from the plane, en route to Japan

Snow and ice covered the rolling hills between Beijing and Ulaan Baatar (commonly called "U. B."). I admit that the thought of spending five or six days in these conditions, with temperatures down to -30 F. made me ask myself why didn't I pick someplace warm to spend New Year's Eve. We landed near sunset, and taxied past several Russian or Chinese AN-2 Colts, a single prop aircraft with a bi-wing configuration that holds 12 passengers. Immediately, I started

trying to figure out how I could finagle a ride on one of these planes, but it didn't happen this trip, although it wasn't because lack of effort. Maybe on the next trip.

Miat Airlines AN-24, which is a Russian-built plane

Ice and snow still covered most of the runway, and it seemed to me that the pilot taxied too fast for comfort. We had arrived at the airport when it was still dark, but by the time we took off, the sun bathed the nearby mountains in that special pink glow that it alone is capable of making. Our turboprop twin engine Russian-built AN-24 aircraft lifted off normally, and I watched the landing gear retract. The exterior of the plane looked much more streamlined than the Spartan interior. We were offered tea after take off, and a Hershey candy bar and a chocolate-covered cookie that tasted better than the Hershey bar. There were no tray tables, the seats reclined every which direction, and clearly, this aircraft did not fly under the FAA regulations. However, that did not bother me. This plane was built to be rugged; the C-130's that I fly to Antarctica aren't much better on the inside. The engines sounded good and the pilots obviously were experienced.

Aralbai, the Eagle Hunter

…Around 9 PM on New Years' Eve, Aralbai gave us all a toast of vodka. I couldn't fake it this time, because instead of pouring it into a bowl, he filled a shot glass, and gave it to me. For the first time in my life, I tasted vodka. But he said he would only ask us to take one drink, and I figured I could handle one shot. Every one knew that I had been faking it previously when I started coughing and sputtering. Then I gave Aralbai a special toast, which either BoBo or Canat translated. Prior to leaving Houston I bought some space shuttle mission decals, a couple of patches from the Apollo 11 moon mission, and a Swiss Army knife for myself, since I had just lost the Buck knife that I had carried for twenty-nine years. This is roughly what I said: "I would like to give a toast to Aralbai, a man that I respect very much. Thirty years ago, Americans first walked on the moon. The Apollo 11 crew carried this patch for their mission, upon which is our national bird, the American eagle flying over the surface of the moon. In its claws is an olive branch, a symbol of peace. Neil Armstrong and Buzz Aldrin left a plaque on the moon that said, 'We came in peace for all mankind.' " I gave him the patch, and the Swiss Army knife. He said simply,

“Arokman”, which means thank you. He didn’t say anything more, but Sheryl and Diane said that they saw him looking carefully at the patch, and the next morning I saw him closely examining the blades of the knife.

Sheryl had BoBo (our interpreter) tell the pilot of the AN-24 that I would like to go into the cockpit since I am a pilot. BoBo told him that I am a famous American pilot. I wish she hadn’t told him that, but it worked. BoBo also was allowed there, because the co-pilot needed a translator. We were in there for about an hour. Once again, I was asked many questions, and in all fairness, did my share of asking. The pilot looked like he ate Americans for breakfast with his stocky physique and shaved head. He reminds me of Odd Job, from the movie, “Goldfinger”. The co-pilot has his own company in Ulaan Baatar called “RADAR”. I sent them all some space shuttle memorabilia after I returned home. We landed at the same town that we had on the way out to Ulgii for refueling. They allowed me to be in the cockpit for take off. After we leveled off at 4500 meters (16,000 feet), I took my seat back in the coach section. At the U. B. airport, a frozen sheep carcass traveled around the luggage conveyor belt.

(Note: I returned to Mongolia and China in August, 2001 – the photos below are from that trip).

Little girl in front of yak cart at her Ger

Family that lived in Ger in Mongolia

Yak

Great Wall, outside of Beijing, China

Terra Cotta, in Xi’an, China

Sampan on Yangtze River tributary in China