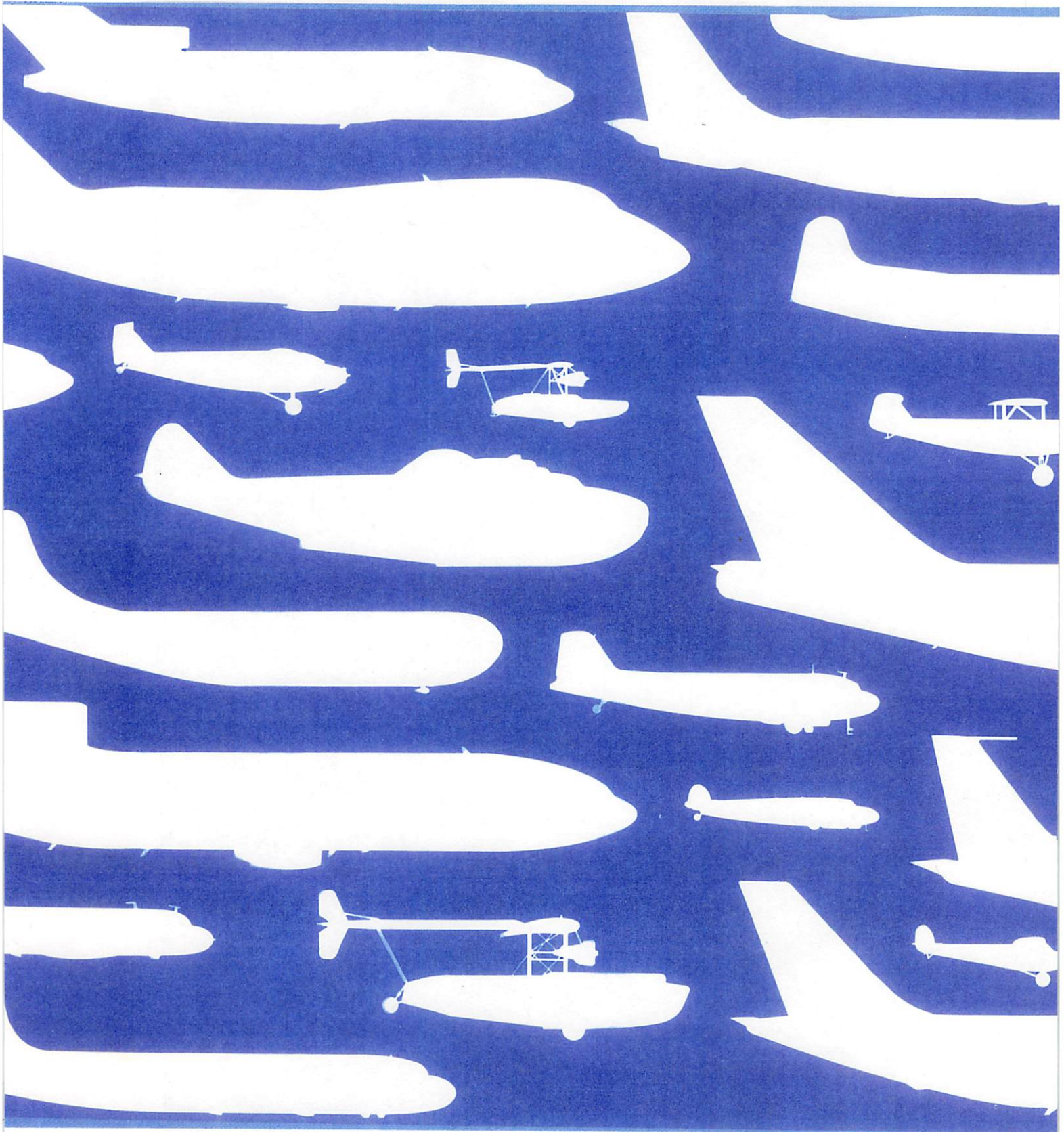


An Aviation Career

"Gee, Gramps. I didn't know that"



Robert C. Evans

An Aviation Career

"Gee, Gramps, I Didn't Know That"



Robert C. Evans - Army Air Corps Pilot

(2 years - 1938 - 1940)

- Pan American Master Ocean Pilot

(36 years - 1940 - 1976)

DEDICATION - OF "AN AVIATION CAREER"

- For grandchildren, who might say, as David who did say, "Gee, Gramps, I didn't know that" - after listening to a flying story that I was telling.
- To my children, who had a father who might have been away for their birth, birthdays, holidays, and other special events in their lives.
- To my wife, Wilma Acker Evans, who accepted my choice of career - and her extra responsibility for when I was away - "somewhere in the world".

Robert C. Evans

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FALL OF 1937 - STUDENT AT MICHIGAN STATE COLLEGE - AND INTEREST IN MILITARY AVIATION

When I returned to Michigan State College in the fall of '37, for my senior year, I was aware that my expected job after graduation was no longer available to me. I had selected Business Administration, purely on this job expectation, otherwise I would have preferred the study of Forestry. Now, I had no specific goal after next year's graduation, but was not overly concerned either.

So, was it luck or fate that day, when I learned that the U.S. Navy would be visiting M.S.C. for the purpose of promoting their Naval Aviation Cadet Program? They were looking for candidates who could meet their qualification criteria - and ROTC students were especially favored because of their military experience.

On the scheduled day, I was one of a group of about 20 ROTC students that reported to hear the Navy proposal. They outlined an exciting adventure. It would entail a year of pilot training at Pensacola, FL. to become a pilot and graduate as an Ensign - then years of duty and the potential of a career in the Navy. It sounded attractive to me - and I agreed to the physical exam, a psychological exam, and signing an application, indicating my interest. All went well - and I was advised that a decision would be mailed to me at a later date.

The more I thought about it, the prospects of a military career was attractive to me, since I was completing my fourth year of college ROTC [Cavalry] and enjoyed the activity and discipline of military routine. In addition to ROTC classes, I had enjoyed the drills, parades and the summer camp for military maneuvers. I had also enjoyed the extra curricular activities of our Cavalry Club for horse riding on paper chases, morning cookouts and practice in horseback wrestling.

Within a few weeks after the Navy program was presented, the U.S. Army Air Corps was on Campus offering similar inducements to enter their program. At the urging of my Commandant, I attended to hear their proposal - and again was duly impressed. So, I took the physical exam, and the psychological tests - and again passed favorably. I signed their application - and again was informed that a decision would come at a later date. Now, I had two military opportunities - and was excited.

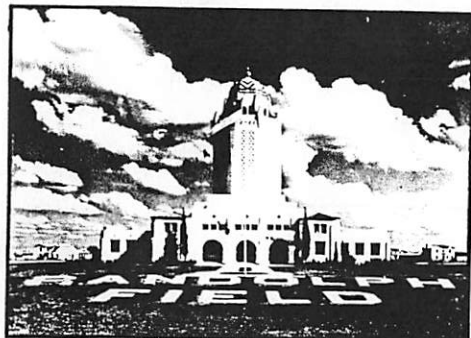
As the weeks of my senior year rushed by, still another military opportunity for a career arose. The Michigan National Guard Unit at Wayne County airport. near Detroit, was looking for a likely candidate to attend the Army Air Corps flight school as a commissioned officer. As a four year ROTC student that would be commissioned upon graduation, I qualified as a candidate. It meant a year at the flight school at Randolph Field, San Antonio, TX. - and upon graduation, return to the National Guard Unit for service. Should there be a need for a job, Edsel Ford, who was an honorary member of the unit, had a standing offer of a good job.

This was an attractive opportunity, and 13 ROTC seniors went to the meeting, including myself. We all listened to the program that confirmed our original interest, and took the physical and psychological tests. I was pleased to learn that I was one of four selected for final consideration. Unfortunately, when the final selection was made, I was not "that one". Naturally I was disappointed, as the proposition was so good. But, two opportunities with the Navy and the Army Air Corps still existed to go as a cadet. I was still hopeful of being an aviator. [By the way, aviation experience was not a requirement for a candidate. In fact, they said they preferred an untrained candidate, as he would not have any bad habits to overcome. I had only flown once - when the year before I accepted a private pilot's offer to ride as his passenger. During the flight, the pilot had an engine problem, with oil leaking and covering the windscreen. He made a forced landing which he executed well. I never realized the serious implications of our predicament - and later credited him with a job well done.

As my senior year progressed, I found myself increasingly favorable to a military aviation career. When a letter arrived from the Army Air Corps on January 1938, offering me a cadet position in the June class, I accepted immediately. From then on, my thoughts and plans were on my post graduation choice. I would be posted to Randolph Field, located at San Antonio, TX. Fortunately, my senior year academics came easily, so my senior year at Mich. State College was a very pleasant experience. This was doubly so, as I had met an interesting girl in my House Architecture class - named Wilma Jean Acker. During January to May 1938, we met many times to get well acquainted, before I left for Texas.

Graduation from Michigan State College took place in May 1938 when I received a B.A. degree in Business Administration. I also received a 2nd. Lt. Commission in the U.S. Army Cavalry Reserve, but later had to resign the commission to be eligible for the Army Air Corps cadet program.

RANDOLPH FIELD - San Antonio, Texas (1938)



ADMINISTRATION BUILDING



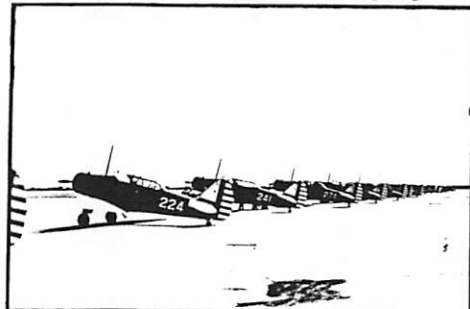
CADET INSTRUCTION



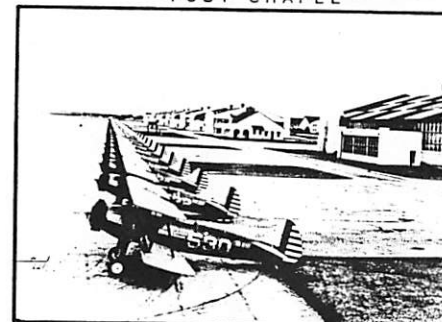
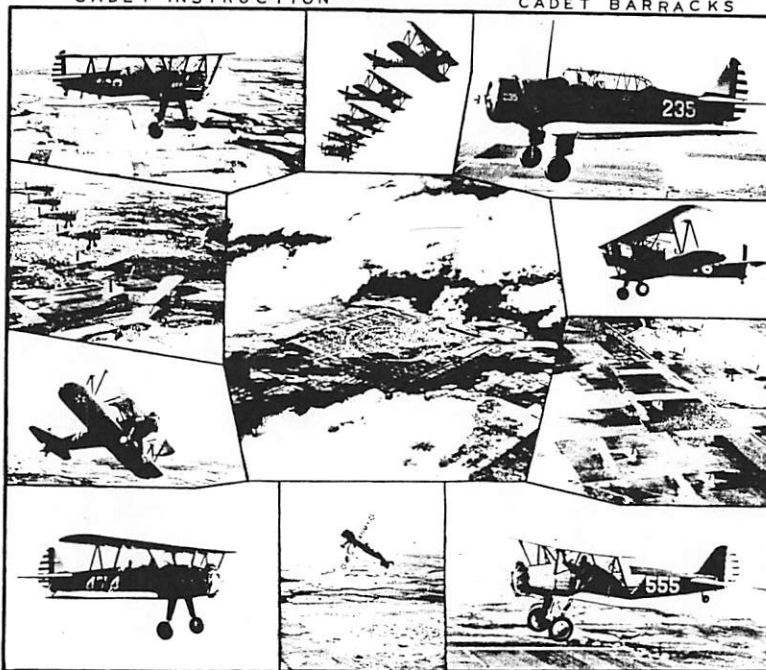
CADET BARRACKS



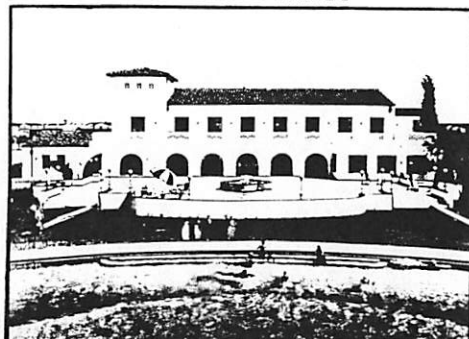
POST CHAPEL



TRAINING PLANES



TRAINING PLANES



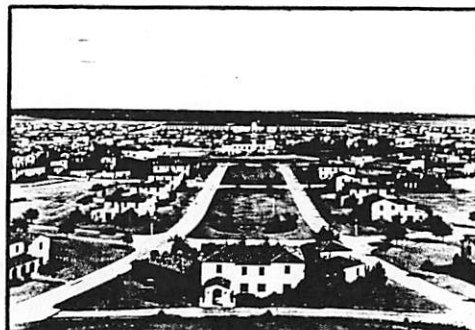
OFFICERS' CLUB



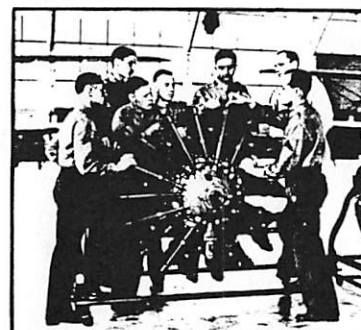
CADET AREA



ACADEMIC BUILDING



OFFICERS AREA



CADET INSTRUCTION



CADET ADMINISTRATION

JUNE 1938 - CADET ENLISTMENT U.S. ARMY AIR CORPS

By June 1938, preparations were complete for departure to San Antonio, Texas. I had visited Wilma Jean at her home in Muskegon, Michigan to say good-by- with promises to write often. My personal effects were stored at my parents home in Detroit, Michigan. On the scheduled day, I reported to the enlistment office in Detroit, where a somber ceremony took place. That was the reading of my enlistment requirements - the swearing of allegiance to the USA - and the penalties if violated. Now, I realized, I really was in the Army. They gave me a train ticket to San Antonio - transported me to the station - and soon I was on my way.

On the train trip, I found that other young men were joining that train enroute to San Antonio - and destined for Randolph Field. By arrival time, we numbered twenty or more - and enjoyed conjecturing about our future. We were met by Army personnel who had buses ready to transport our group to Randolph Field. I admired the attractive towers at the entry to the base - and the attractive architecture of the buildings as we proceeded to the Cadet Barracks area. That was the last pleasant thought I had that day.

-PRIMARY TRAINING - RANDOLPH FIELD, TEXAS

When our bus stopped at the Cadet Barracks arrival area - bedlam reigned. "Hell Week" was about to start.

Our group of 20 young men in civilian dress were immediately confronted, as we descended from the bus, by upperclass cadets in uniform. They were screaming at us in loud and offensive voices - deliberately causing confusion in our group. We were separated individually, with two or more upperclass for each new arrival. They commanded, "Stand at attention Mister". And, we would try to comply - but more commands followed.

"I said - stand at attention Mister". "Do you call that attention"? "Stand tall - and keep those shoulders back. And tuck in that chin Mister". "Suck up that gut".

"Did you hear me Mister"?

"Yes".

"When you address an upperclass - address them as Sir". "Is that understood?"

"Yes Sir"

"What did you say"? "Say it like you mean it"

"YES SIR"

"What is your name Mister"?

"From now on you are Doodad Robert Evans" "What is your name Mister"?

"Doodad Robert Evans, Sir".

"Where do you come from Doodad"?

"From Michigan, Sir"

"Well, I'll be damned - here's a damned yankee" "Bail out - and when you hear that - slap your chest - and drop to a half crouch - and hold it".

[After 3-4 minutes - the legs get tired and quaking - but you had better fight it. Woe to those who complain or straighten up.]

All the while - questions - "Are you an eager Mister?"

"Yes sir"

"Do you want to complain?"

"No sir"

"Why are you here?"

"To be a flying cadet, Sir"

"Do you think a piece of crap like you can fly"?

"Yes Sir"

"Stand up - and bail out again"

After nearly 2 hours of enduring insults, learning to stand "At Attention", answering "Yes Sir" and "No Sir" - and doing endless Bail Outs - we were finally released to go to our barracks. But, not before we were instructed to run any time we were outside our barracks - unless we were in a group formation. [For the four months we were Doodads - we would run outside the barracks.] Finally, we were released - and we broke into a run for the barracks. Those Doodads who resisted, or were slow learners, or were smart asses, were held longer - and were marked for more attention as time passed.

As Doodads, our lives were controlled by the Upperclass Cadets, who were charged with the responsibility to shape up the newcomers into military personnel. We were taught to stand tall, eyes to the front, and to respond to questions accurately with a "Sir" added. Any response that was not satisfactory was corrected - with discussion or punishment of a "Bail Out". Upperclassmen will often push to the limits of patience - so the Doodad can be taught. The lessons are many - and if one reacts badly, or rebellious - it will be regretted for the resulting yells, threats, insults, bail out commands - or possibly demerits. The "tie-ups" were soon recognized and their life was less than joyful. For the quick and cooperative learners - they were tested often but with milder results.

When I was released from the "Hell Reception", I ran to A Barracks to find my room assignment. It was on the 3rd floor - and there I found my three roommates waiting. Gil Gilchrist was from Alabama; Wyatt Exum, from South Carolina; and John Henry, from Detroit, Michigan. Two Yankees and two southern rebels in the same room - but happily it never was a problem. Discussions yes- problems no.

We had little time to socialize, as the Upperclassmen were at the door. When one entered, "Attention" was called out - and we stood by our beds. They were there to give us instructions on how to make our beds, and store our clothes in a military manner. Any deviation would result in punishment or possible demerits. After our instructions, they did a little test hazing of practice "Bail Outs" - just to demonstrate their authority - lest we forget.

Cadets were assigned to A or B barracks according to height. The taller cadets in A and the shorter ones in B barracks. A cadets were known as "High Pockets" and B cadets as "Tail Draggers". Each barracks had three floors - with the Upperclass assigned to the 2nd floor - so they could be near and discipline the Doodads if there was a problem.

At our first Company formation, we were assigned a position in a squad according to our height. At 73" I was in A Company- 1st Platoon - A Squad - among the tallest of Cadets. The Upperclass were the Cadet Officers and Squad leaders with command authority. The Commandant of Cadets was a Army Air Corps Colonel - in charge of the complete Cadet program. He spoke to us at our first formation -welcoming us to Randolph Field and to the Cadet program. But, he cautioned us - to look to the right - then look to the left - because at graduation only half of us would be there and become pilots. With a wan smile - we looked at one another and wondered, "Will I be there?" The Commandant then outlined our orientation program for the week - hair cuts, measuring for uniforms etc. But, the big announcement was - flying would begin the second week.

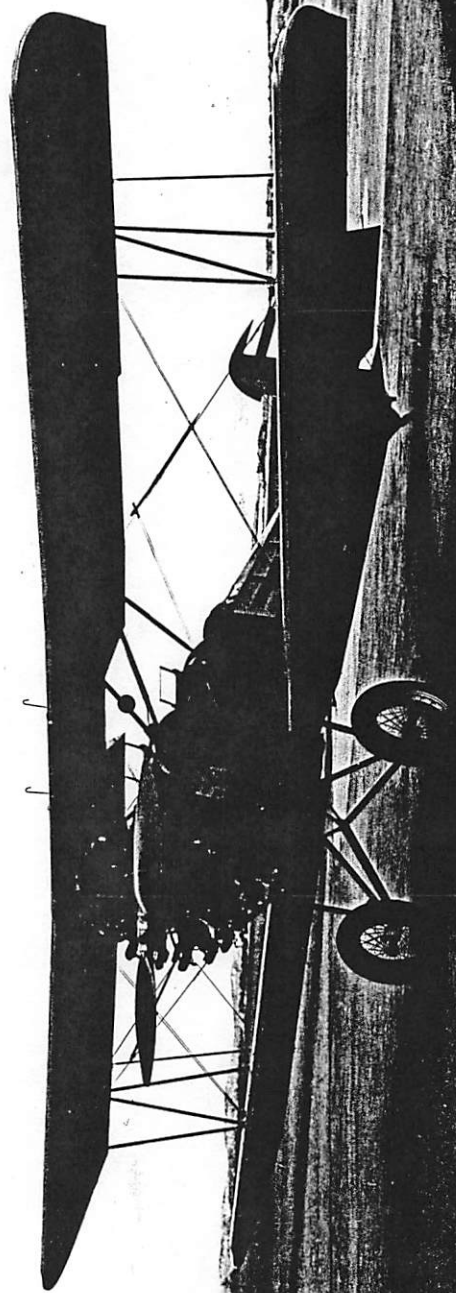
After the announcements, P.A. martial music came on - and we were marched to the Mess Hall for dinner. Hazing continued at the meals. Doodads must sit on the first 6 inches of our chair, backs straight, head erect and eyes only straight ahead. We never originate conversation and answer questions in a military manner. Upperclass sit at the head of the table - Doodads at the bottom. End Doodads acted as "gunners" - who would hold up platters for the waiters to refill. When the food was brought, it was always passed to the head of the table for Upperclass first helping. Food quality and quantity were excellent.

Thursday night dinner was traditional "Poetry Night". It was used as a relief valve for the Doodads who may have felt they had been ill used by Upperclass hazing. Consequently, he was permitted to write the most derogatory poem he could originate about the man. If it was clever, derogatory and outstanding - he was sent to read it to the entire assembly. When there were no more poems to be read - the winning poem was voted by the Doodads. His candidate in the poem would cause that Upperclassman to be designated "Chief Chicken Shit". He would then be compelled to eat his next dinner at a separate table - with a plate of "Chicken Shit" as a center piece.

"Hell Week" continued, but the Doodads were shaping up rapidly. There were exceptions - and my roommate Wyatt Exum was one who challenged the system at every opportunity. He exceeded his 15 demerits most every week - and as a result - spent the following Saturday afternoon walking the ramp with his rifle. He was a born tie-up - and seemingly took pride in challenging the system. He did not want to conform. That week we were measured for uniforms, had a military haircut [required weekly] and attended preliminary flight classes. Upperclass continually kept the pressure on for unmilitary action by the Doodads - such as failure to salute, uniform irregularities, bad attitude, rooms untidy or clothes incorrectly stored. Then, it was punishment or demerits.



CADET ROBERT C. EVANS - Primary Stage (June 1938)



PRIMARY STAGE TRAINER - PT-3 - "Solo aircraft".

(G132-467J-PD)(S-24-37-9A)(I/5) PT-3A AIRPLANE RANDOLPH FIELD TEXAS.

One Doodad, from Harvard, was challenged for his untidy haircut and was asked if he had gotten his weekly haircut. He replied in the affirmative, but records at the barbershop proved that he had lied. He was discharged and gone by that very evening. The lie was not considered a minor infraction, and was an object lesson to all cadets.

"Hell Week" was ending, but Upperclass continued their responsibility to observe and correct any infraction of the rules. Doodads had become aware of the system, and with any consideration could avoid undue punishment. Routine hazing was tolerated with correct attitude and cooperation - and the hazing was minimal. [What fun is it if the victim is cooperative and seemingly enjoying it.]

We had been expecting it, but excitement rose when the announcement came, "There will be flying today on A Stage." One could feel the spirit of excitement as we marched to the A Stage flight line. The aircraft were all lined up waiting for the cadets. Mostly, there were PT-11's and PT-13's - modern trainers - and I wondered which I would get. Groups of cadets would drop off - as we passed the hangars for the 11's and 13's. Our final group continued to I hangar where there were PT-3's lined up - looking very similar to World War I biplanes. [They were old and nearly obsolete. Later, we were told that there was a standing offer by the mechanics -they would buy the cadet a free dinner if you cracked one up.] Of course, you had to be around to collect.

Six of us were assigned to our instructor - a Lt. Macintyre. He looked about 30 years old, quiet and easy going. He proved to be an excellent instructor. When my time came to fly, I found it to be pure pleasure - with the new scenes and routines so exciting, it took a while to stop just enjoying and concentrate on making the airplane perform. I was shown the usual flight maneuvers - take off, straight and level flight, power on and power off descents, stalls, and recovery, and approach to landing and touch down. Before he left me, he offered good advice I've never forgotten - "Never concentrate your vision on one place - but keep your head and eyes moving- to see what's happening around you. It will save your life". The PT-3 was an excellent trainer with good stability and honest reactions - and no surprises. I liked it so much - I soon forgot the more modern 11's and 13's. The PT-3 was my airplane. It was bi-wing, with two open cockpits- communicating by gosport speaking tubes - connected to helmet earphones. I loved it - and the flights it gave me.

Each time we had dual flight, the instructor demanded smoother flight and more accurate maneuvers. If you were sloppy, you did it again until it was right - and it was important to do so - as I wanted to please him. Gradually, the flying became familiar - and I became more confident I could do it right. We had completed about four hours of dual when we started concentrating on takeoff's and landings. I watched the airspeed for take off and climb for maximum efficiency, leveled off at exactly 1000 ft., timed my turns for precise patterns at 1000 ft. Then flying downwind a precise distance so when I made my 180 degree turn toward the field I could start my descent and landing at the desired position. I was beginning to feel like a pilot.

Reports, from other cadets, started coming in about individuals who had soloed - in several other squadrons. That made the rest of us all the more eager to reach solo status. On my 7th hour of instruction, we had been making a number of take offs and landings, when my instructor said, "O.K. - take us back to the line." I thought our lesson was finished. But, when we parked, he remarked matter of factly, "Go take three more take offs and landings and then return to the line." He was so casual, it did not register that I was about to solo. I taxied out - knowing he was watching every move - so it was like he was still with me. In position, I applied power - reached take off speed and eased into the air and started climbing. Wow - I suddenly realized I was flying alone. I whooped and hollered - then settled down to work on a precise pattern as I had been taught. Before I knew it, I was on final approach - and made a very smooth landing. I had soloed. I took off again- flew the pattern and landed with a slight bounce. That cured my overconfidence - and I flew the 3rd pattern to the best of my ability. It was satisfactory - and I returned to the line as instructed.. Walking to my instructor- I tried to act casual but my spirits were soaring. He was smiling when he said, "That was O.K. - you bounced on the 2nd landing." Obviously, he had been watching. No one could have been more happy than I, especially when I saw the envious glances and received the congratulations of my classmates. It was a happy day - and I'm sure I wrote home about it.

After solo, the new pilots are scheduled for more solo time to improve their flight skills and confidence. Dual flight would also be scheduled to teach additional maneuvers - such as loops, slow rolls and Immelmans [slow roll at the top of a loop]. When landing techniques are improved - you are taught spot landing - requiring additional skill and concentration. By this time, confidence was running high - and one might start to think he was a "hot pilot". But, overconfidence is a pilot's worst enemy - and I became a victim to it. I was practicing aerobatics one day and did a sloppy slow roll - resulting in the loss of a couple hundred feet and increased airspeed. I was disgusted, but decided to use the speed for a quick loop. Up I went into the loop -ran out of airspeed to complete the loop - and found myself climbing vertical and no speed to control the plane. The plane stopped in the vertical position - and started to slid backwards - scaring the hell out of me. There was nothing I could do, but let it fall, and wish I was not there. Eventually, the tail caught some air pressure from the fall - to snap me out of the backward slide - and I managed to get it flying level again. I was a contrite and wiser pilot after that. I had learned a good lesson - cheaply. Later, I learned that you never do that maneuver with a PT-3- as they not stressed for it and you are likely to shed a tail. I was lucky - and almost won that dinner from the mechanics.

Some cadets never seem to reach a proficiency to solo. Usually, they are given 12-14 hours of instruction - and it is obvious to all concerned that they are not going to make it. They will be discharged from the program - and sadly depart. Two of our group of six failed to qualify - with one being very upset with the decision. The class is slowly being decimated. I remember the admonition - look to the right and left.

With the primary cadets getting pretty sharp - it is time to be introduced to night flying. It proved to be different at night - with poorer orientation to the plane's attitude

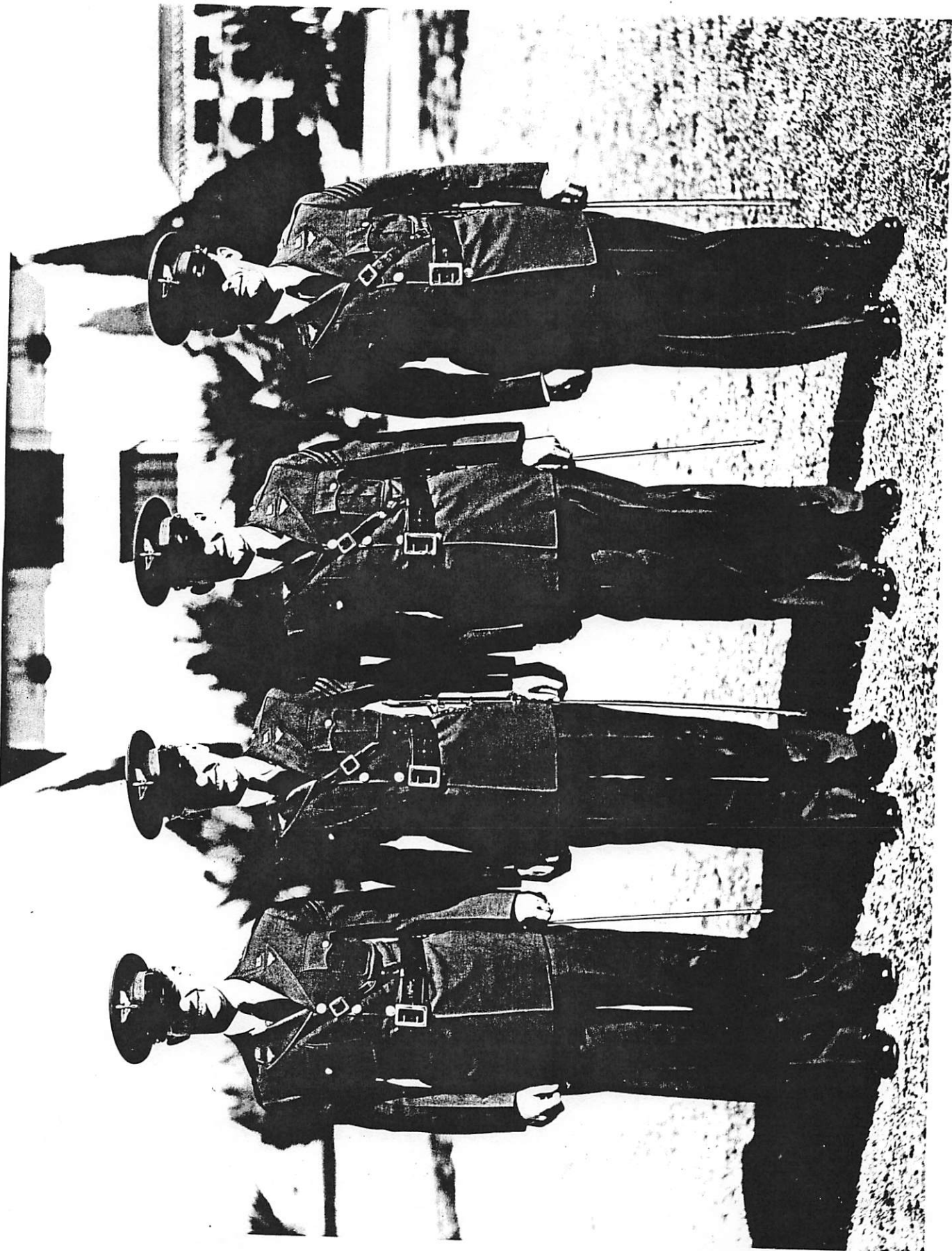
relative to the earth. And, the same poor orientation existed when you entered the glare of the flood lights in the landing area. It was different - scary and disturbing. But, like many new experiences - when it became familiar - we lost our concern. On one night flight, shortly after take off, the plane was vibrating badly. I thought it was the engine - and if it quit, I would have to bail out, and that prospect was disturbing. I continued flight, finally reaching 1000 ft. and safe for a bail out. I still didn't like the idea and kept flying until I was finally lined up to land - and knew I would make it. All went well to a safe landing. When I taxied in - it was found to be a loose wheel that caused the vibration. But, I learned a lesson that night. I had always been keen on making a parachute jump, but when faced with the prospects of being forced to - I'd lost the desire to do so. Maybe I'd learn to like it, but I was never put to test.

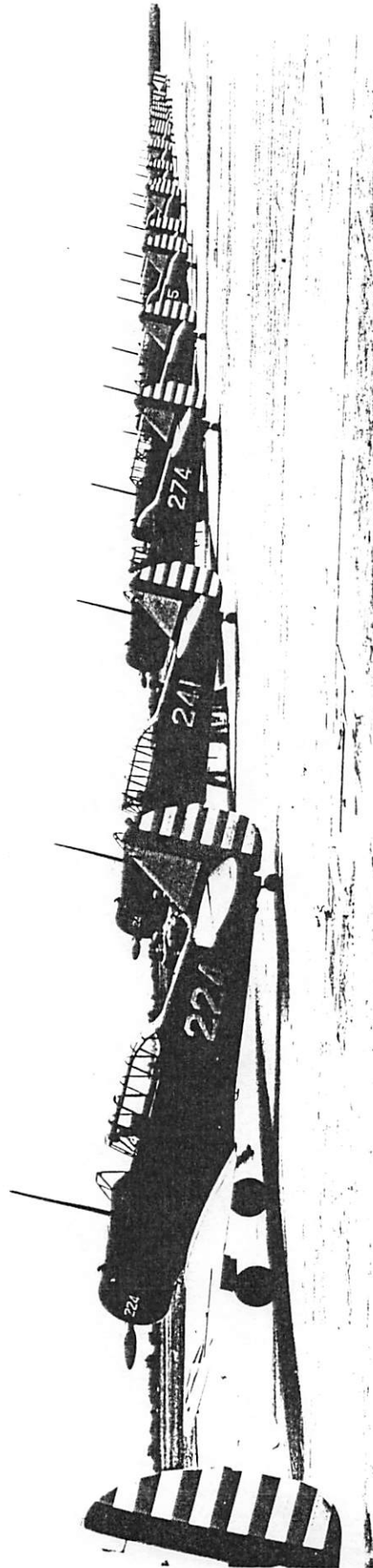
Primary flight stage was nearing an end. Within a couple weeks, the Upperclass would move to Kelly Field, west of San Antonio - and we would take over their status and responsibilities. But, the present Upperclass had one more opportunity to harass the Doodads with "Hell Saturday" - coming next weekend. We were given all kinds of dire warnings by the Upperclass, which we discounted. We were wrong.

At 2 P.M. on Saturday, the Doodads were assembled with rifles for "Rifle Calisthenics". It was a hot day in Texas - but we were young, strong, and eager to perform. Maybe we were a little ragged as the drill began, but the harassment was irritating. We drilled for 30 minutes, and continued into an hour, and we were drenched with sweat. Still it continued - and it was "hell" - and we began to question how long we could last. Then, a rifle clattered as the first man collapsed. Then, another fell, and another. [As they collapsed, an ambulance stood by to take them to the hospital for a check up.] The drill continued until about a dozen had fallen. Finally, after 2 hours, it was over - and we were dismissed - running, of course. I've never been more tired in my life. "Hell Saturday" was well named. But, most every one recovered enough to go into San Antonio on the 6 P.M. bus. A lot of bragging and a lot of beer was consumed that night.

Within the week, we got even with the Upperclass. They left to visit Kelly Field to see their new quarters for Advanced Stage - and while they were gone, we moved all their clothes and personal gear to different rooms. It was orderly looking, so it would not be recognized - until Mess Call. When discovered, there were shouts, curses, and threats arising from the 2nd floor. Timing was perfect - Mess Call sounded and we were saved - for the moment. After dinner, they had only a few hours to recover - amid a lot of curses and wailing. There were a few retributions - but they were almost enjoyed by seeing their distress. Taps sounded before they could really take revenge. They were scheduled to leave for the Kelly Field transfer early the next morning - so we escaped their wrath. Good riddance, and we were eager to take over and be Top Dog.

BASIC STAGE - CADET OFFICERS (Evans-Carlson-Alder-Jones)





BASIC STAGE TRAINER - BT-9 "Day & Night X-Country"

--BASIC TRAINING - RANDOLPH FIELD

Basic Stage , for our class of 39 - B was about to begin. We became Upperclass - and the new Doodads were due to arrive within a few days. Cadet Officers were appointed - and I was surprised and pleased to be selected by the Commandant to be a Cadet Lieutenant. That meant that I would be responsible for a platoon of three squads of Cadets - at all formations and inspections. (I wondered why I was selected - but my record was good. I had four years of ROTC experience and was commissioned a 2nd Lt. Reserve, US Cavalry, no excessive demerits, and a voice that easily reached the rear ranks. So, maybe I did qualify.)

The new class of Doodads arrived - and they got the usual reception. They experienced their "Hell Week" as we Upperclass tried to whip them into shape. We had our own individuals who sometimes went too far - but they had the leveling title of being a "Chicken Shit" - and, some of being the Chief C S. I disciplined where it was obvious, but my officer status let me be above most of the harassing. [Where I was most challenged was by my own classmates - like my roommate Exum who always seemed to challenge the system. He tested me too far one time - and got demerits as a result. But, he knew it was deserved - and did not resent it.] After a week of "Hell" for the Doodads - life settled down to flying and related academic subjects.

The Basic Flying was done on the opposite side of Randolph Field from Primary. I was assigned to Lt. Shepard as my instructor and again was fortunate to get a good one. He was medium height, pleasant, and easy to talk to. Our Basic aircraft was a low wing monoplane - designated the BT-9. It was a modern metal aircraft - with more complex instruments- and had an enclosed canopy for quiet operation. Our flight instruction was to extend and sharpen our skills - as we had already demonstrated our ability to fly. We would learn aerobatics, spins and recovery, cross wind landings, and recovery from simulated engine failure. A number of cross country flights were also on the schedule. This was more sophisticated flying - but if you passed Basic - graduation was almost assured. I found it was not difficult - but new challenges did arise.

Ground school was more intensive in Basic Stage. Navigation was a prime subject - with reading of aviation charts and measuring courses for compass direction. The class instructor emphasized that we should always believe our compass and not our instincts. One of our cadets really took that lesson seriously on his first cross country. It was a simple flight from Randolph Field to Austin, TX. The distance was 80 miles on a course of 30 degrees - with a highway leading directly to it. This cadet had driven it many times to visit his girl friend. So, when he took off and set 30 degrees on his compass - he found himself going off to the northwest rather than to Austin. But, he remembered his instructor's admonition - "Believe your compass" - and flew a considerable distance before he realized his error. Compasses leave off a zero on their reading due lack of space - so 30 degrees was 3 on his compass - and he had been flying 30 on his compass - or 300 degrees [90 degrees off course]. His flight direction had been observed by his flight instructor - so it became public knowledge. He became famous - in a negative way. But, he must have learned well - he graduated.

In addition to flight navigation, other required subjects were meteorology, air frame construction, and Morse code. All were interesting, as they applied directly to aviation practical use. However, Morse code was the nemesis for many of us. Probably the reason was that the class came directly after lunch. Listening to dit dah's when we were full and sleepy was not conducive to quick learning. We were required to reach a proficiency of reading and recording 16 words per minute of Morse code to graduate from the class. That meant 80 miscellaneous letters, in groups of five, every minute - for five minutes.

I progressed to 12 words per minute quite easily, but then hit a plateau of stalled progress. About half the class failed to qualify on test day - myself included. Those who failed were scheduled for night classes. That did it. Either I was more alert, or more highly motivated, because within the week I caught the rhythm of the code and was doing the required 16 words per minute. In fact, when I did qualify - I asked for a test on 20 words per minute - and managed that also. But, I did feel that it was my limit. Thankfully, I was excused from the night classes. I was always aware of C W code after that, but never had to put it to practical use.

Time had come to have the ability to do cross country flying. We were trained to relate our flight to charts that showed significant features for the pilot. That way we could relate to the progress of our flight and know our location. On one of my first cross - country flight, I kept good track of my progress until suddenly I was aware it did not seem to relate. I twisted and turned - trying to find a familiar feature - and could not. I felt that I could not be far off - but I was worried not to be oriented - as I may stray further. I wanted to reorient my exact position. Knowing that railroad stations always had their names posted - and a railroad and a small town were in view - I decided to go down and identify. I got down low on the tracks and flew toward the station. But, there was a water tower just beyond the station, creating a hazard. Just as I could almost read the name - I had to abruptly pull up. I tried again unsuccessfully, and then the third time before the name clarified and I could identify the name. Checking the map, I found I was 7 miles off course - so it was hardly worth the effort. But, I knew where I was - and I could relax. I have often wondered what the local people thought of that pilot flying up the railroad tracks. Probably, they rightly assumed correctly that it was one of those crazy flying cadets.

The standard BT - 9 used on Basic Stage was an honest airplane that recovered well in a spin. This was not true for the BT - 8, a Republic fighter, that had been added to the Basic trainers, due to a shortage of training aircraft. A number of them had crashed, as it had a bad reputation for easily ground looping and being unresponsive to controls when spinning. We had specific warning - "Never let it spin more than two turns. And if it failed to recover - put the controls back into the spin - then kick the rudder hard and full travel. If still no recovery - jump."

One day I was assigned to fly the BT - 8. I was impressed with the responsive reactions to the controls, but after all, it had been a fighter and was fun to fly. It was a going machine. I had wrung it out quite well - and decided to stall and let it spin.



BASIC STAGE TRAINER - BT-8 "Watch out for spins".

I pulled up into the stall - and WHAM - it snapped into the spin before I expected it. Suddenly, we were into the second turn of the spin - and I started recovery - but it did not respond. Remembering, I put it back into the spin and realized I was descending rapidly and had lost count of the spins. Now, a little desperate, I kick hard and full on opposite rudder, and crossed the ailerons. Just when I was considering the jump, I felt a nibble on the controls starting to recover - and the wings begin to level. Very delicately, I eased the ailerons to level the wings - and then eased back on the elevators to stop descent. Only then did I have confidence that I would not have to jump. I did not count the spins - but when I was level again, the altimeter said I had lost nearly 8000 feet. I was a bit shaken - especially when complete recovery was only 1000 feet above the ground. The Air Corps nearly lost a plane that day - and I just missed a parachute jump. When I came for my landing, you can bet I was alert for any ground loop. I had already had my surprise for the day. [Within the month, that same type aircraft had two accidents - one on a ground loop at a night landing - and the other on a spin and a bail out. The bail out pilot reported the plane nearly hit him on the descent.]

Weekend trips to San Antonio began to pale- when I discovered hand- ball. We had two excellent four wall courts at the Mess Hall basement and I learned to love the game. We seldom had time to play during the week, so weekends proved to be ideal. The courts were readily available, as most cadets wanted to get away from the base on weekends. Weekends were also ideal for letter writing. I was keeping in regular contact with Wilma Jean who was finishing her senior year at Michigan State College. In addition, I wrote to my parents regularly, as the family was interested in my military career. Receiving a letter was a big event too - for a Cadet.

We were scheduled for our first night cross-country trip. It was relatively simple and would not take long. From take off at Randolph Field, we'd fly about 30 miles to Kelly Field, southwest of San Antonio, then turn south to Pleasanton, about 60 miles away, then turn back to return to Randolph Field. It was not a difficult flight, but designed to gain experience with night flying. The usual visual references would be missing at night and cockpit illusions needed familiarity. As I recall, all went well on my flight. Going to Kelly Field one could relate the lights of San Antonio, but turning south to Pleasanton, it was black with few ground references and was a little disconcerting. Pleasanton stood out like a beacon however, so around the city and back to the familiarity of Randolph Field. So, all went well for me - and most all others. There was an exception.

One pilot came back terrified - and planned to quit as a result. It happened this way. He was quite relaxed and in control going to Kelly Field - and even navigated to Pleasanton O.K. That was when the trouble started. He overheaded Pleasanton, and started his left turn back on the final course. In doing so, his vision returned to the cockpit to observe his instruments. When he looked out again to confirm his turn, he could not see the town at all. Perplexed, he dipped his left wing even lower, and still no town lights were visible. He knew that something was wrong but could not determine why. He didn't even feel right. He looked and looked over the side - but nothing. Then, he looked over his head - and there was Pleasanton - and he was inverted up side down. Apparently what happened, when he started his bank to turn around the town, and his

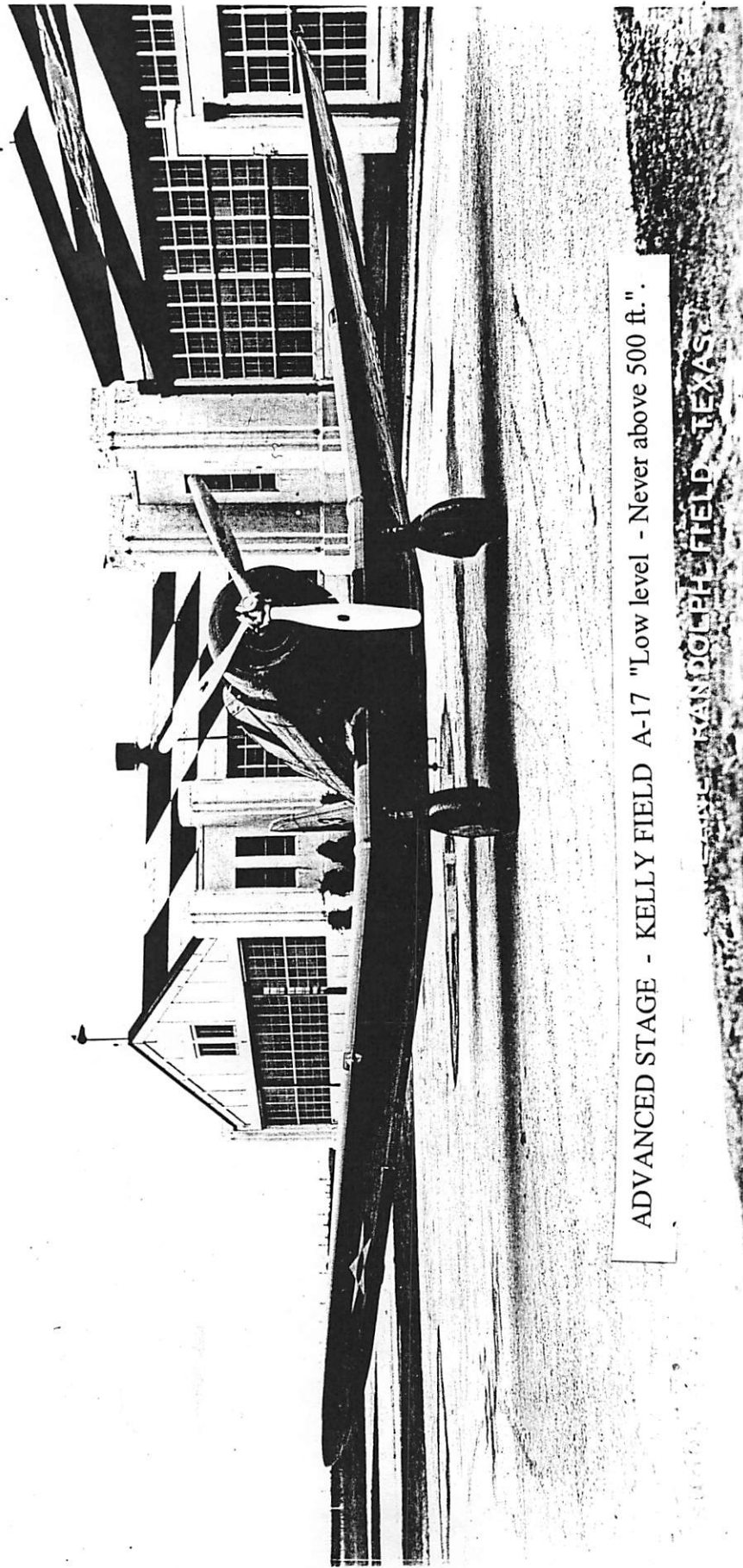
eyes returned to the cockpit, his bank continued until he was inverted. Then, he lost his orientation, and panic set in, so he had difficulty in getting right side up. He lost altitude and he thought he was going to crash. It was traumatic for him - but he managed to recover and return to Randolph. However, he was still disturbed after arrival - and sought out his Instructor to report he was going to resign. The next day, his Instructor reviewed what probably happened, and reassured the Cadet. He stayed - and eventually graduated. I'll bet he remembers his first night cross-country.

A long distance cross country is scheduled - and we prepare for it. The schedule is to fly during daylight from Randolph Field to Dallas, TX and then on to Oklahoma City. After nightfall, we would return over the same route following the airline route night rotating lights. From Randolph Field, we were released at intervals, so the individual was required to do his own navigating. My daylight flight went very well, and I was able to follow ground check points to my destination at Oklahoma City. I felt very confident about the night return flight.

Take offs for the night return was permitted shortly after sunset - although dark clouds were visible toward the south where we were headed. All seemed well until the cloud layers thickened and occasional lightning evident. I continued on course - but was forced lower to stay out of the clouds. I continued until it was obvious I was heading into a thunder storm area - so I deviated to the east to go around it. Suddenly, I was encountering hail that was falling out of the leading edge of the thunderstorm. It was big hail - and it started breaking the glass in the plane canopy. Again I turned east to stay away from the main storm area, but it was some time before I could escape the hail which was continuing and breaking glass in the canopy. By this time, about half the glass was gone, creating air noise that was disturbing and causing some concern. Obviously, the hail was hitting the rest of the plane, but I could not assess that damage. Lightning and hail were finally left behind, but I estimated that I was about 30 miles east of my course. I continued under the cloud layer, and the unstable air was bouncing me like a yo-yo, while the air noise shrieked in my ears. The direction I needed to go was dark and flashing lightning and I began to realize I could not get through the storm area as I was not instrument qualified. And, even I was qualified, it seemed inadvisable. Fortunately, I spotted a rotating beacon of an airfield that had its runway lights on. I decided to land and wait out the storm. I could not contact a tower for landing instructions, but a lighted windsock gave me the wind direction for landing. The sock was blowing straight out, so it was obvious there was a strong wind. I picked my runway, and made a low approach to avoid an overshoot. When I turned on my landing lights, I saw a water tower on my flight path. I pulled up over it, and when passed it, pushed down again so I could land soon after the runway end lights. When I crossed the lights, I throttled back, and the plane seemed to descend vertically - due to the strong headwind. I need not have worried about an overshoot. After I taxied to the parking area, I was met by two classmates who had landed ahead of me. Later, we would be joined by ten more - so there were 13 of us who found this haven from a storm. Randolph Field was notified - and we were told to stay there - and plan to overnight. We would get flying orders tomorrow. Now we could relax - but we spent most of the night telling lurid stories about the storm.

The next morning, one of the instructors from Basic Stage flew in to assess the situation. Seeing that all were in good spirits, and the storm was gone, he released all of them to return to Randolph Field - except me. My plane was damaged too badly to fly - with missing glass in the canopy and a battered leading edge of the wing due to the hail. I was directed to fly back with the Instructor.

We heard later that there was an official hearing for releasing the cadets for that night flight. Apparently, the storm moved in more rapidly than expected - and typical of the Texas weather. The pilots who landed were not criticized - but commended for good judgement. Fortunately, there were no accidents for our group due to the severe storm. [Older and wiser pilot learn that Meteorology is not an exact science and wisely try to keep an Ace in the hole.]



ADVANCED STAGE - KELLY FIELD A-17 "Low level - Never above 500 ft."

KELLY FIELD TEXAS

-ADVANCED TRAINING - KELLY FIELD

The time has come for the Class of 39 - B to move to Kelly Field - departing Randolph Field with mixed emotions. It has been a great experience. We have become pilots - but now we will be trained to be pilots with special skills in combat. The assignments were for squadrons skilled in Pursuit (Fighters), Attack (Low level combat), Observation, and Multi-engine (Bombers). I was assigned to an Attack squadron - whose planes were A - 17's - designed for low level surprise attacks. Those assigned to Attack were intrigued with our new Commanding Officer who spoke to us about our new training. He said, "Forget all the past restrictions about low level flying. From now on, all flights will fly at a low level - and I don't want to catch you ABOVE 500 feet." The murmur of approval was audible - and the grins of anticipation infectious. This was going to be fun.

Military discipline at Kelly Field was relaxed - as we were no longer concerned about hazing. Military courtesies, however, were strictly observed for officers of higher rank - as normal - even after commissioning. Instructors, however, even dispensed with those when we were working - just like we were fellow officers.

Kelly Field was an old facility dating from World War I. The barracks were one-story buildings made of wood, but all comforts were present. Our beds were assembled in a large room holding 20 or so - with our personal gear kept in a foot locker. Showers and toilets were furnished to accommodate multiple persons. The Mess Hall was large enough to hold the entire class - but somewhat primitive. However, the Menus were famous - as the food was outstandingly good and unlimited in quantity. Especially appreciated, was a five compartment ice cream chest, that we were invited to "help yourself - 24 hours of the day." This was very popular at first - then only mildly so as we satisfied our hunger for ice cream.

All Cadets at Kelly Field were expected to graduate - as they had demonstrated their ability to fly as capable pilots. However, we were destined to lose two more who would not graduate. Two of the Multi-engine pilots who were flying together, became intrigued with their interphone conversation and made a mistake. They thought their conversation was confined within the aircraft circuit, but they made a mistake and mishandled the "Interphone " switch. So, when they started telling dirty jokes for their personal amusement - instead of being confined to the aircraft - it was broadcast over the airways to the general public of San Antonio. Complaints poured into the Cadet Commanders Office - and the result was severe and inevitable. They would be discharged from the service. That was very unfortunate - because it claimed two popular and very capable cadet pilots. They were victims of their own folly - especially when it became public and political. In this instance, fate was unkind.

Our Attack flying was pure fun - and we could not have made it better, if we had scheduled our own flight operations. Low level flying did require vigilance to insure against accidents. But, this is just what we were trained to avoid - and still be effective for offensive warfare. We remembered our primary instructor's admonition, "Keep the

head and eyes moving" - especially important in low level flying with sudden expectations of trouble.

There were reports of some flights under a bridge instead of over it. But, when we were advised that cables were often hanging under a bridge, that inclination was cooled. My favorite fun was flying low in river valleys - then pop out to simulate bombing of our target. In the process, I'm sure we scared lots of chickens and ranch cattle. We heard of some protests, and even claims for damages, but the farmers and ranchers seldom got our aircraft numbers to identify the pilot. Besides, weren't we training for national defense?

Flying Cadets were not allowed to be married - at least not acknowledged. However, after graduation, and we were commissioned officers and gentlemen, marriage was permissible and approved by the military authorities. My graduation was practically assured - so I gave a lot of thought about Wilma Jean and me being married. I realized that we had known one another only five months at college plus short visits to our respective homes to meet our families, but she was the one I wanted for a wife. So, the time was now, before she was committed to a career after her graduation. I could not go home to propose, so I wrote her a proposal letter and sent along an engagement ring. She accepted - foregoing a career as a Dietician. She would graduate at Michigan State College June 12, 1939 - and I expected to be based at March Field, California after graduation - so a Fall wedding seemed most practical and agreeable. I was very pleased with my prospects.

The graduation of our Class of '39 - B was scheduled for mid-May 1939. My parents were planning to drive down from Detroit, Michigan - and invited Wilma to join them for the trip. Wilma was attending Merrill Palmer, located in Detroit, which was a graduate school for child development, as an honor student from Michigan State College. She had to obtain permission from the school authorities to go - but they readily consented. My father would be towing a new Graham-Paige automobile for me. He had arranged to buy it as a factory demonstrator - and as the Factory Manager of Graham-Paige - sent it down the assembly line for complete refurbishing. It would cost me \$600.

The final weeks at Kelly Field were hectic but exciting. Our Attack Squadron was doing some tactical flight training - and some practice of formation flying for graduation. I was meeting with the tailor for my Officer uniforms as a 2nd Lt. US Army Air Corps - and the photographer for class and squadron pictures. In addition, I was studying for a regular commission exam - scheduled for a week after graduation. The study did not get a very high priority - to my regret. (More on this later.)

Graduation time was finally here. My parents and Wilma Jean had arrived the night before, but I had only a short time to greet them with all the activity at Kelly Field. However, there was time to welcome my girl wearing her engagement ring - and to see the new car they towed all the way from Michigan. Wilma and I agreed it was beautiful - a light silver gray sedan nicely streamlined. I had my parents, a fiancée, a new car, and graduation. As my Alabama room-mate would say, "I was walking in tall cotton".

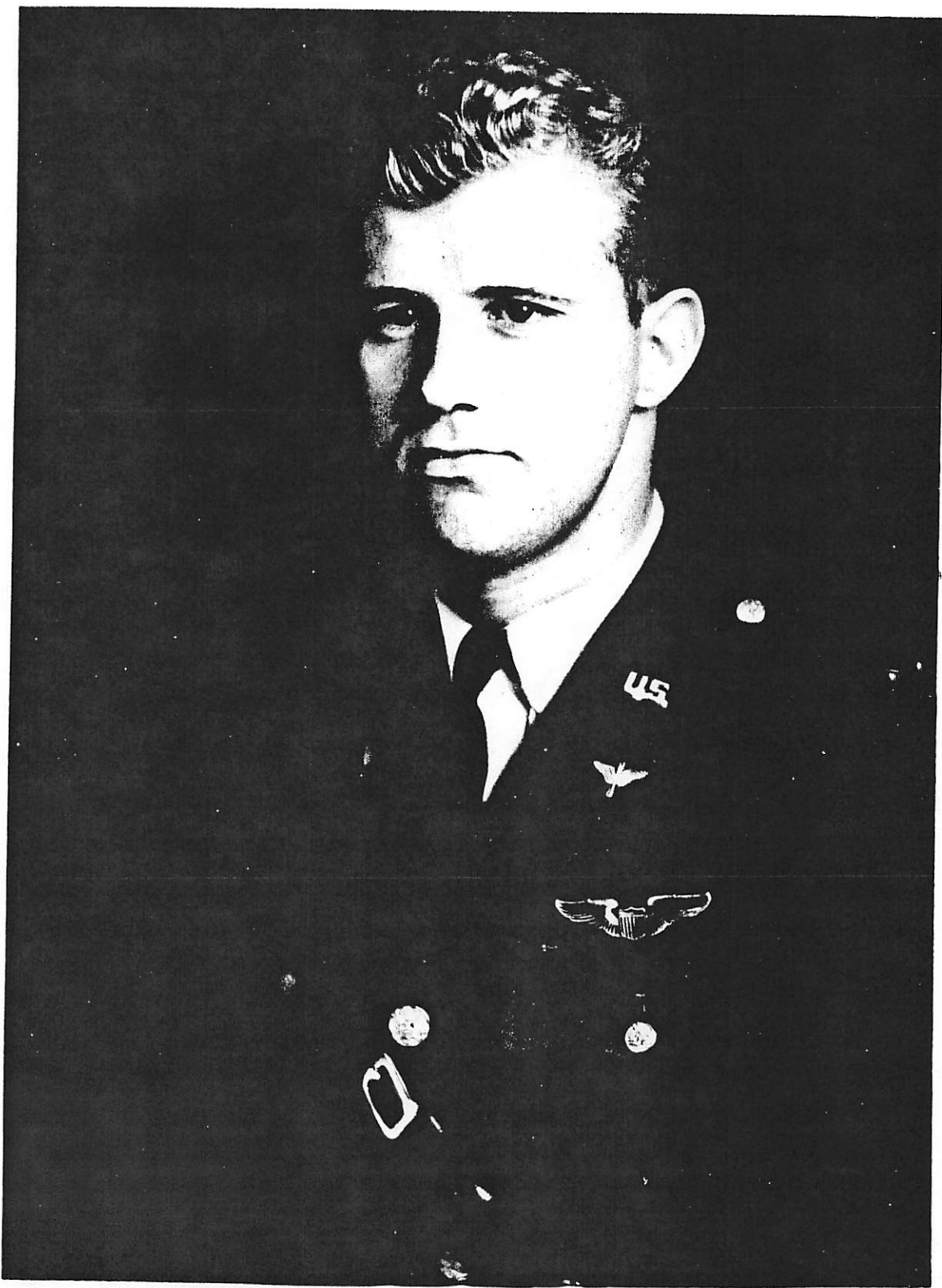
Graduation Day was finally here. As I had been admonished, nearly a year before, I looked left and right and I was still here - for which I was grateful. The Ceremony would take place at the flight line on the parking ramp - with all the airplanes parked for a backdrop. After the usual speeches, our new rank was conferred, and now I was entitled to wear the silver wings of a pilot in the US Army Air Corps. Then, the Commandant gave the order, "Officers, man your airplanes - and pass in review." We then went to our airplanes, started the engines, and taxied to a take off as we had practiced. We assembled in an air rendezvous west of San Antonio - and each squadron in turn - flew by the reviewing stand of officials and spectators in formation. It was a proud moment for every new officer who had survived a year of testing and accomplishment. The Cadet days had ended - and the future in military life looked exciting and promising. After our fly by, we landed to exchange flight clothes for our new officer uniforms, and join the spectators. I found my parents and Wilma - and asked her to pin on my new silver wings. And, I thanked my parents for coming to graduation - and for all the things in my life that made it possible.

Our time together would be brief, as they would depart the next morning to return to Michigan. I wanted them to see Randolph Field where I had spent eight months in Primary and Basic Stage. It is impressive - and I wanted to show it and also revive a few memories. In San Antonio, we visited the Alamo, the Market, and the Mexican area of the town - to give them some tourist sites to remember. That night was a Graduation Military Ball at the Gunter Hotel - where my parents and Wilma were staying. We made a brief appearance, but Wilma and I had bigger plans to discuss. I bid my parents goodnight and good-by - and thanked them again for coming. They would make an early departure the next morning. When my Dad says early - he means very early. Wilma and I stayed up to talk for several hours. Finally, it was a sad parting - but we had lots of plans to enjoy regarding our future.

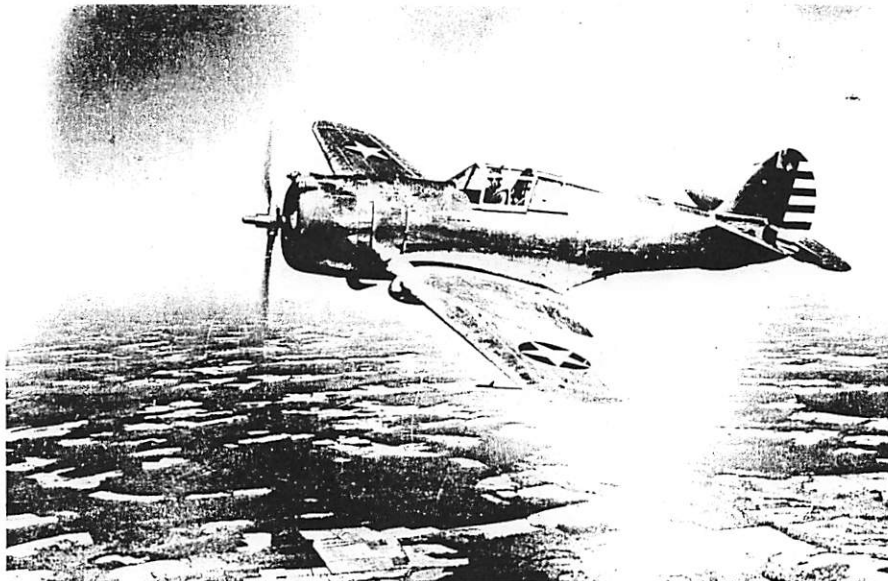
After Graduation and the departure of family and fiancée' - there were many details to complete and decisions to make. We were all waiting to learn of our new base assignment - and finally it was posted. I had chosen March Field, California - but I was assigned to Langley Field, Virginia to join the 33rd Pursuit Squadron. I was disappointed at first - then happy at being assigned to fly fighters - the hot ones.

When I found that I was not assigned to California - it occurred to me that Wilma and I could be married while I was enroute to my assignment at Langley Field, VA. It had the advantage of simplifying the Fall marriage plans - so I proposed the change to Wilma and she agreed. She suggested June 12th afternoon - after her graduation in the morning. We were happy with the plans, but gave little thought to the complications this would cause for her family to make wedding arrangements on such short notice.

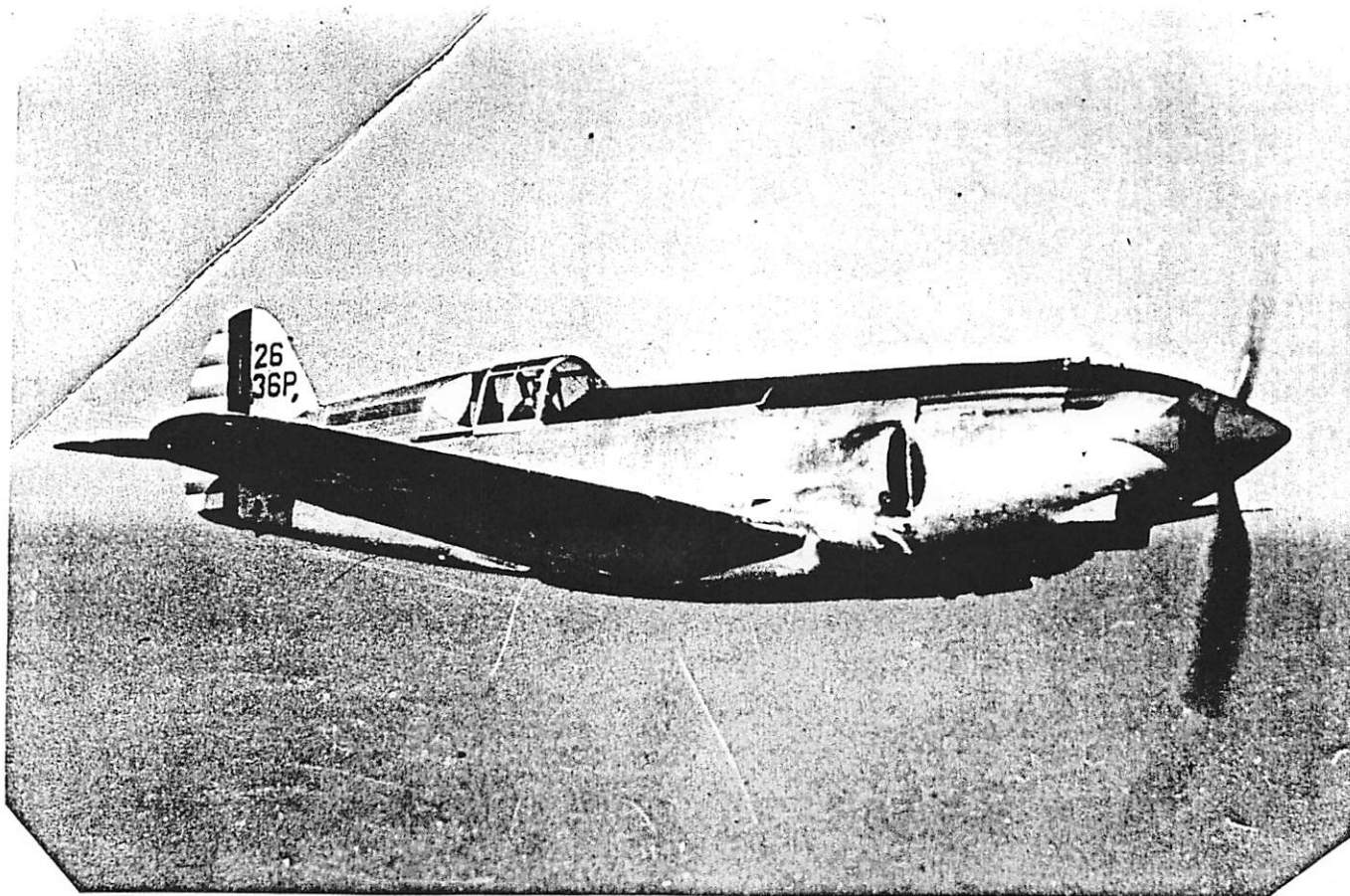
Early June I took my exam for a regular commission. I should have studied harder. I learned that I got a grade of 93 - but unfortunately they gave commissions to only 93 1/2. So, I just missed. Later, I learned they would offer another exam within a few months. I vowed to study harder.



COMMISSIONED - 2ND LT. - Langley Field, VA. - "33rd Pursuit Squadron".(1939)



CURTISS P-36 PURSUIT - "Air Corps First Line Fighter". (1940)
CURTISS P-37 (Experimental - First Allison engine)



1939 - 1940 2nd LIEUTENANT - LANGLEY FIELD, VIRGINIA
33rd PURSUIT SQUADRON

About June 7th, I was released at Kelly Field with orders to report to Langley Field, VA June 18th. I headed for Michigan - and had no plans to stop enroute. That way I could save a day and the motel costs. I made it home in 33 hours - but I had to utilize a hitch hiker to drive while I slept a while.

I spent two days (June 9 & 10) with my parents - then drove to East Lansing, Michigan to meet Wilma at Michigan State College. She gave me all the final wedding plans for June 12th. It had been a hectic period but all plans were settled - made by Wilma's sister Janet, who was attending Michigan State College at that time. Families and friends had been invited, the wedding arranged at the Presbyterian Church in East Lansing, with a reception planned afterward. Wilma would graduate the morning of the 12th - with the wedding ceremonies in the afternoon - with a 3-4 hour interval between events. And, that was the way it worked - just like clockwork. Janet's planning was perfectly executed. By 5 PM - we were a married couple - and departing for my assignment at Langley Field - with good-bys and well wishes from family and friends. (June 12, 2001 - we celebrated our 62nd Anniversary.)

We had six days for honeymoon travel to Langley Field - during which we acquired a puppy Cocker Spaniel that we named Major. [Bad choice of names - it caused a minor embarrassment later on.] I checked in at Langley Field on June 18th - and was much impressed with the new base. The Adjutant on duty welcomed us to Langley - and told me that I should call on the Base Commander within 3 days - to be received between 4-5 PM. Should they not be at home, or receiving, to leave a calling card including my wife's name. Being married, I was informed that no base housing was available, and that I should find a home outside the base - for which I would get a housing allowance of \$45 per month. That would be in addition to my officers pay of \$205 per month. That proved to be adequate to live reasonably - especially with PX privileges for food purchases and some other necessity items. In fact, within the year, I had paid off a \$700 debt for car and Officer uniforms.

Our housing search resulted in a small modest house in Buckroe Beach, a resort community. It was located only 1 1/2 blocks from a swimming beach - and only a short 5 miles from the Langley Field base. Another classmate and his wife had the adjacent house - a Fred and Fritzie McNelly. We were friends and we could share transport - and the wives would have a friend when their husbands were gone. McNelly and I were both assigned to the 33rd Fighter Squadron. We reported to our Squadron Commander - a Major Barcus - and liked his relaxed easy going personality. We were welcomed by our fellow officers too - and our orientation was made easy by their friendliness.

The 33rd Squadron flew P - 36's - the latest fighter made by North American Corporation. It was a low wing, single seat, retractable gear plane with a double row radial engine by Pratt and Whitney. It was powerful - and I was in a bit of awe at seeing it. With an experienced pilot, I had a walk-about to learn some hints about flying it.

We talked about all the external controls, and then I sat in the cockpit while he identified all the switches and instruments. It was a new machine and a bit confusing at first - but then the logic and practice made it become familiar. I spent several hours in the cockpit for familiarization before I felt comfortable - and ready to fly. Being a single seater, no one could accompany me into the air - so I'd have to train myself. I was ready to fly.

Nothing I had flown before prepared me for the power and agility of the P - 36. When I applied full power to start the take-off - suddenly I was rapidly accelerating - and my mind raced to keep up with the plane. Noticing that I was at take-off speed - a light touch on the control and I leaped into the air. I was so preoccupied with flying, I delayed raising the gear. Then, with normal responses of controls, the gear was raised - and I was climbing rapidly skyward. Once I had the plane cleaned up (gear and flaps up), it was like any other airplane - except considerably more powerful and sensitive. My confidence grew as it responded to all my simple maneuvers. This was going to be fun. After an hour of practice flight, I returned to Langley for my landing. All went well on the approach - I lowered the gear and final flaps - descending to the runway - and made the touch down. I was very satisfied with my first flight - and pleased to be flying a high performance aircraft.

After a couple more familiarity flights - I was assigned to fly formation with a flight leader. After I made my take off, I joined up with him on his right wing. But, he wanted a much tighter formation than I had ever flown - as he kept motioning me to tighten up. Soon I was close enough to see his hand motions - and our wings were almost touching. I learned to fly close but slightly higher to avoid possible wing contact. This position was to become very familiar - and could be maintained no matter what maneuvering the leader made. Being close, one could see any slight alteration of position, and respond to it. I found that I concentrated on position - and flew the aircraft automatically - to maintain position and was quite comfortable with it. Consequently, the leader could, and did, do loops, slow rolls, dives to a close distance to the ground - and a good wingman would always be there.

Generally, our daily squadron flights were scheduled for early morning - for about an hour. Returning, it was customary for all pilots to assemble at the Officers Club for a full breakfast. When finished, we'd gamble with dice to see who got stuck for the whole check. I calculated that would be about \$12-\$15 - a sobering amount for a new 2nd Lt. to pay. Happily, it never happened. One time, I was the last to be eliminated - but never had to pay the check while I was at Langley. (Luck - I'd rather have it than skill.)

Ground gunnery competition between Squadrons was traditional. So when it was announced - everyone was charged with doing his best. The competition was for a pilot to fire at a ground target - scoring points for the hits. A sighting device, projected onto the windshield, allowed the pilot to sight and observe the target simultaneously. The still air of early morning was the best time to fire - as the heat of later morning bounced you off the target. Every pilot would be allowed three passes to make his shots. My first two passes were fine - and I was confident of the target was hit. On the third pass, I was encountering unstable air - and just when it was time to fire, I bounced off the target.

Not wanting to waste the pass, I quickly realigned and fired on the target - but I was very low. So close, that when I flew over the target my windshield was splattered with mud that was kicked up by the bullets. That was too close and was an object lesson. Later, when the competition results were announced, our squadron had won by 5 hits. I chose to believe that my final pass may have given us the score needed - but never mentioned it. I did learn that the year before, a pilot doing ground gunnery, flew right through the target, and was killed - no doubt concentrating on his firing hits. It is a mesmerizing maneuver - and the potential needs to be kept in mind.

Major Barcus was forming an aerobatics team - and I was honored to be asked to join. We would do aerobatics in formation - so the ability to maintain position was critical. It proved to be great fun - and I learned to hold position regardless of the maneuver. The secret was to ignore the attitude of the leader, whether rolling, inverted, or looping - and maintain your position on his wing. That seems to be an instinctive manipulation - and I seemed to have it. Major Barcus was very proud and solicitous of his team - and hoped to enter some inter-service competition. But, it never happened.

Our Squadron received a P - 37 aircraft in a test program. We were expected to fly it to put hours of operation on it and make reports. Only 13 were ever built. It looked like a racing aircraft - with the cockpit moved back close to the tail - so there was a long nose to look over. It was powered with the first Allison engines and liquid cooled. All the pilots were eager to fly it - but lost some of the enthusiasm when they found the far back cockpit uncomfortable. On violent maneuvers- the centrifugal force would momentarily cause the pilot to black out. The cockpit position was a mistake - and was changed in the development of the P - 40 - with the Allison engine.

By June 1940, I had completed my year with the squadron - and was permitted to take extensive cross-country flights. I was eager to visit my family in Michigan - so I requested the P - 37 to make the flight. It was O.K.'d by Major Barcus - but he knew I'd likely put on a show off performance. So, his remark to me was, "Remember, we need that airplane." [I'm sure he included the pilot too - I think.]. My flight home was very satisfying in many respects. The flight to Michigan was interesting - and I would be landing at Wayne County Airport - home of the National Guard Unit where I interviewed two years before. I wanted to "grandstand" and impress the home folks - so I started descent from 10,000 ft. to reach a high speed to circle of the airport. I landed - and taxied to the National Guard parking area. Cars streamed over to see this new hot airplane. A National Guard Officer came out to check on the plane - and turned out to be the same one I interviewed with when they were looking for a candidate to go to the Air Corps Flying School. Surprisingly, he recognized me - and his first words spoken were, "Well, I guess we picked the wrong candidate." (Their choice had "washed out".) Among the spectators was a news reporter who interviewed me - took some pictures - and later published a "Home boy makes good" story. My family arrived - and I was the proud one to show them the plane.

I had a brief but very pleasant visit at home - but it was time to return to Langley. My brother, Lester and family, lived in a country setting west of Wayne, Michigan, and

I promised to do a fly by for the family waiting there at his home. I gave them a good show - and then a final low pass. They debated for a long time, "Did he fly over the electric wires - or under them?" (Really - it was over them - as Major Barcus words were remembered. He needed the airplane.) My P - 37 flight home was well remembered - by myself and the family. Several still insist, "He went under the wires."

Another regular commission exam was announced - and this time I intended to take my study more seriously. I found that I enjoyed military life and felt well suited for it - so a regular commission was important to my career. I studied hard for the exam - knowing in general what to expect. When I saw the exam, every question and problem looked familiar. When I finished, I was positive that I had done well. This was confirmed by an officer named Stevenson, who was in our Squadron. He had been called to Washington D.C. to grade papers of the exam, and was aware of the relative grades. He reported that he was honor bound not to reveal grades - but he could report that I had done well - and had nothing to worry about. Great - now I had only to wait for the announcement of commissions.

One night I was called at home - and told to report to the Squadron immediately - for a National Emergency Alert. I was not told the where or why of the Alert - but told to expect to be gone about a week. This was difficult for wives not to know - but was a part of military life. When I reported to the Squadron, no one could answer what the Emergency was all about - except it was to simulate an Emergency for enemy action. The Squadron was ready to fly - planes and Officers - as Major Barcus was very efficient. Early the next morning, our Squadron took to the air - with Barksdale Field, Louisiana as our destination. The flight went smoothly, but when we arrived, landing and getting parking space was hectic. We were finally directed to our parking space - and then the pilots were bussed to an open hangar where we were assigned cots for our sleeping. We were advised that our meals would be served at a local Mess Hall.

Now, we began to hear the rumors about this Air Corps Alert. Generally, it was to determine the Air Corps response to a military emergency - and how many planes of all types could respond within a 48 hour period. It was peace time in the U.S. - but the war in Europe was getting the attention of our military and politician leaders. After the 48 hours had elapsed, we had about 350 aircraft of all types assembled from the entire country. (At that time, Col. Lindbergh was reporting that Germany had thousands of military aircraft available.)

We did little flying at Barksdale Field. It was assumed that if you arrived there, you were an operational unit. It gave all of us sobering thoughts about our lack of preparedness. I'm not sure what our national leaders thought - but I could guess it was not reassuring. After five days of relaxing and rumor mongering at Barksdale - we flew back to Langley Field.

Social graces were a part of an officers military life - so Wilma and I often attended the Saturday night dances at the Officers Club. Drinks at the bar were 25 cents, as most of the Club expenses were supported by a room full of slot machines. (The slot machines were set to pay off at 90% - with 10% for the Club to pay it's expenses.) Dance intermission came about midnight - at which time Wilma and I chose to go home.

Consequently, we missed the unusual excitement that happened during or after intermission. The Monday morning stories often told of those people who fell, jumped or were pushed into the pool - or the ugly confrontations when too much drink lowered their inhibitions. One story became a Classic - and was retold many times.

It concerned an Officer named Ping who had a wife with a well endowed figure - and liked to wear low cut dresses. She was also a very aggressive dancer - so it was a matter conjecture about when Ping's wife might "lose it". And, she finally did, during an active dance after intermission - and the event caused considerable excitement and amusement. Unfortunately, we missed the event, as Wilma and I left at intermission and were long gone home. But, we heard the retelling many times - as the general question among Officers for weeks was, "Were you there when Ping's wife lost it?"

I heard that the results of the "regular commission" exam were posted on the bulletin board. Immediately, I hurried to see the results and confirm my name was listed. Shock and disbelief struck me when I read - and reread - the list and my name was not listed. My disappointment was almost physical - and I could not believe it. I found 1st Lt. Stevenson, who had been so confident that "I did not have anything to worry about". We discussed the results - and he told me that I had gotten a 99% on the exam - and that he had no explanation for my not being on the list. The only other factor to consider was my "Efficiency Report" from Major Barcus - but that did not seem likely to me. I did not want to approach him on the matter - but finally he sent for me. He had heard that I had gotten a 99% on the exam - and had wondered about his Efficiency Report. He confirmed that he had given me an "Excellent Efficiency Report" - and if I had gotten a 99% on the exam - he would fly to Washington to learn why I had not gotten a regular commission. This he did, and returned with a sad story of explanation. Major Barcus stated that I had indeed qualified for a regular commission - and it should have been awarded. However, due to a clerical error - my name had been inadvertently omitted from the list sent to Congress for approval. The Air Corps Brass did not wish to acknowledge their error - and send a single name to Congress. So, the decision was to let the matter drop - with the concession that I would automatically be awarded a regular commission on the next exam. He urged me to accept the decision - as he wanted me to stay in the Air Corps. Reluctantly, I agreed to the proposal. Unfortunately, within the week, came an announcement that there would be no more exams for regular commissions for two years. That was bitter medicine, as my seniority for a regular commission would always put me two years behind my classmates.

I decided to explore the potential of Airlines who were actively looking for pilots. Pan American Airways especially intrigued me - with their foreign routes to the Caribbean and South America, and the pioneering of ocean flying. By Aug. 1st, I had decided to resign from active duty - and join Pan American and be based in Miami. Having committed to the change, I was excited at my future prospects. Major Barcus approved the decision. He stated he was sorry to lose me - but did not disagree with my decision. My departure would take place Aug 13th - and with two weeks leave pending - my official separation was Aug. 28th. That timing was very fortunate - because on Sept. 1st the Military services announced that no further resignations would be accepted. Apparently, the war potential was growing nearer - with possible U.S. involvement.

Leaving military service was originally a disappointment to me, as I liked the discipline and the flying of challenging aircraft. What Wilma and I did not like, was the social aspects of rank, especially among wives, whose husband's rank seemed to direct their privilege at social events. Wilma and I discussed this aspect of military life and shared our general reaction to it - not only for the present but definitely for the future. For this reason, I sensed a relief for both of us, after the decision to separate from the service. We expected to enter a more normal social life - so Wilma had no regrets about my leaving the service.

AUG. 1940 - CO-PILOT PAN AM

Wilma's and my spirits were high as drove from Langley Field - because we sensed a new adventure beginning. Southern living in Miami, Florida would be new and different - and it appealed to us. We did not delay en route - and when we arrived - drove directly to Pan American offices in Coconut Grove to report in late that day. That proved to be a fortunate decision - because one's pay and seniority started on that date. I was taken to the office of the Chief Pilot - a Captain Fatt - who welcomed me to Pan American Airways. He was business-like, somewhat abrupt, and soon turned me over to his Secretary for due processing of new hire pilots. I was directed to take time to find housing - and when I had an address - report back to the office for assignment. My Pan Am pay was \$200 per month - or \$45 less than military pay - so we had to live on a new budget. However, I was now free of debt, so I thought it would be adequate. Since the Pan American terminal, Dinner Key, was in Coconut Grove, I wanted a house close by. Fortunately, we found an old, but interesting, Spanish style house that captured our fancy - and only 12 minutes from the Pan American base.

Pan American had a policy that new hire pilots spend two week working in the hangar for the Maintenance Manager. The purpose was to acquaint you with the personnel, maintenance methods, and the aircraft. Pan American only operated flying boats - the primary one being the S - 42. [The others in the fleet were the S - 40, S - 38, and the Commodore - all older types.] The S - 42 was built by Sikorsky and had a boat hull, high wing, with four engines attached plus wing floats for water stability. It flew about 140 mph - unpressurized at 10,000 ft. or below - and carried about 40 passengers. The crew was Captain, co-pilot, flight engineer, radio operator, and steward.

With my two week orientation finished, I was scheduled for flight qualification with Capt. Fatt. It was minimal - with a climb to 7000 ft. where we did two stalls [power on & power off] - then returned to the base area to do 3 take-offs and landings. After flying fighters, it was a slow, lumbering aircraft - but it was positive reacting in flight and the water operation was fun and challenging. Capt. Fatt pronounced me aircraft qualified - and now ready for flight schedule assignment.

As a co - pilot, I had minimal responsibilities. The ground personnel prepared the aircraft, the flight engineer confirmed the preparations and the fuel aboard. Captain and Co - pilot confirmed the flight route selected by a Dispatcher - and the weather report of the Meteorologist. If satisfactory, the Captain signed the flight plan - containing the statement, " In my opinion this flight can be completed safely".

My first flight was to Havana, Cuba - about 180 miles away - with Captain Fatt commanding. It was perfect weather - so we flew at 5000 ft. so the passengers had a good view of the Florida Keys - and the 90 miles across the Florida Straits. It took us about an hour and 20 minutes to reach Havana - where we made one circle of the harbor to confirm our landing area had no ships in the area. A Pan American launch was standing by - and confirmed that the area was free of flotsam that might be a hazard. We made our approach just off the fort guarding the harbor - and landed smoothly on the bay water. My responsibility now was to go to the bow, open a hatch, and install a post -

SIKORSKY - S-40

(Shown on next page.)

Statistics: (Built by Sikorsky Corporation)

Take-off Gross Wt. - 34,000 lbs.

Power - 4 Pratt & Whitney Hornet engines (575 H.P.)

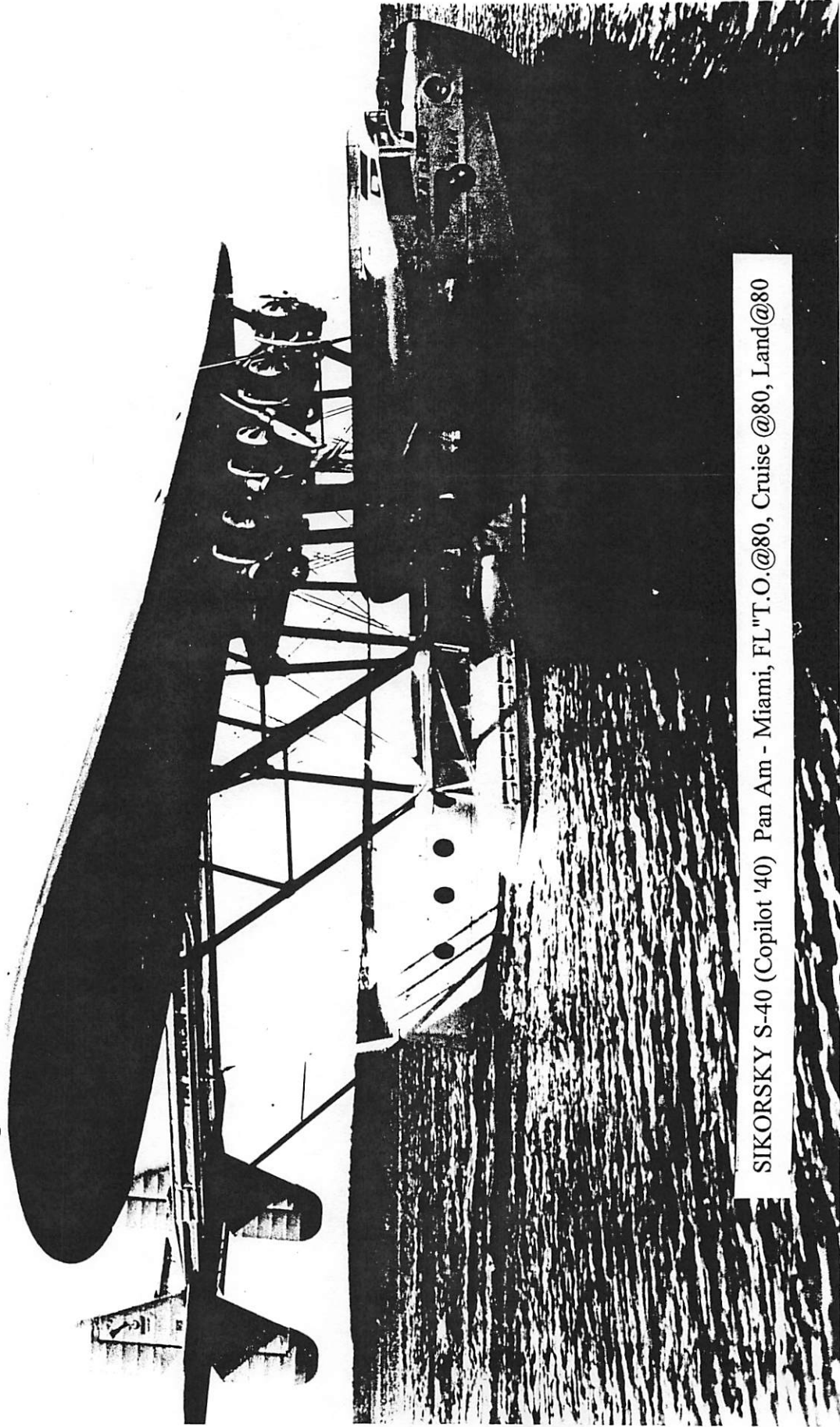
Speed - 115 M.P.H.

Range - 900 Statute miles

Seats - 38

During the 1930's, there was much controversy in the aviation world about the best kind of aircraft for long distance over water flying. Pan American President, Juan Trippe, chose the flying boat and turned to the Sikorsky Corporation in Connecticut to develop such a craft, and led the world in its use. Flying boats had their disadvantages - such as passenger boarding in choppy water, and the corrosion of salt water. These were expensive considerations, but were heavily outweighed by the ability to land on a cleared waterway, whatever the size and weight. And, additionally, the safety consideration of landing on water in an emergency - and likelihood of remaining afloat until help arrived.

(Sikorsky also produced the S-42 in 1934 and proved very successful. It will be found in following pages.)



SIKORSKY S-40 (Copilot '40) Pan Am - Miami, FL "T.O.@80, Cruise @80, Land@80

SIKORSKY - S-42

(Shown on next page)

Statistics: (Built by Sikorsky Corporation)

Take - off Gross Weight - 38,000 lbs.

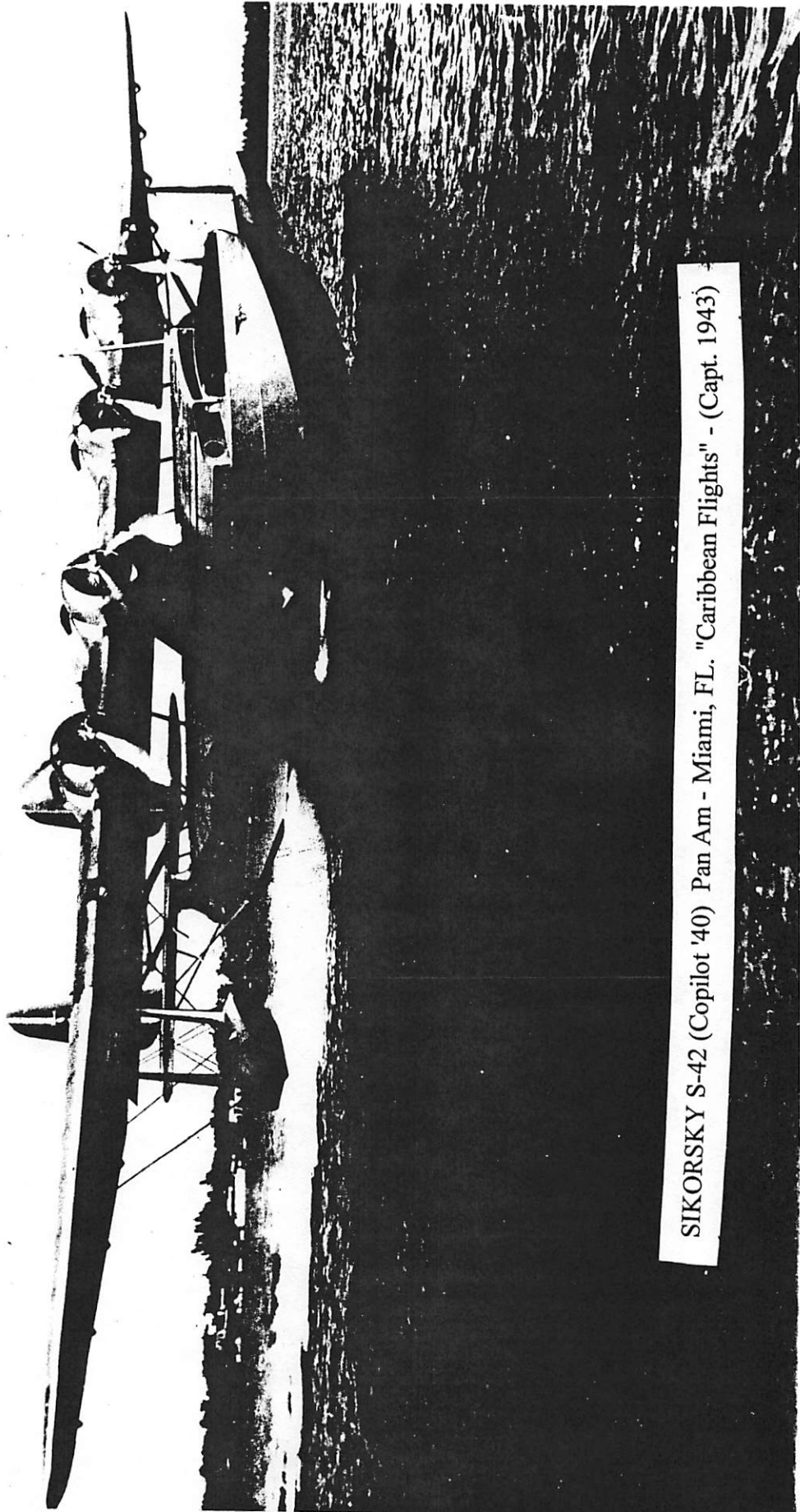
Power - 4 Pratt & Whitney Hornet Engines (700 H.P.)

Speed - 150 M.P.H.

Range - 1200 Statute Miles

Seats - 32

In October 1932, Pan American placed an order for ten aircraft that would be more luxurious, fly faster and farther than the S - 40. It would incorporate all the technical refinements that were revolutionizing the aircraft manufacturing industry. These were large wing flaps, extensive flush riveting, engine synchronizers, propeller brakes, and automatic carburetors. The cost was \$242,000. It was all the aircraft that Pan American expected, and became a great success. It was identified as "An Airliner Before Its Time". Initially it was used to overcome competition in the Caribbean. Later, the S - 42 B was developed - with 750 H.P. engines and a cruise speed of 160 mph. By adding additional fuel tanks, the maximum range was increased to 2800 Statute Miles. This range permitted Survey Flights Trans-Pacific in 1935, Trans-South Pacific 1937, and Trans-Atlantic 1937. Pan American was preparing for Trans-Ocean Commercial Service.



SIKORSKY S-42 (Copilot '40) Pan Am - Miami, FL. "Caribbean Flights" - (Capt. 1943)

on which I will place the mooring line after picking it up from a boatman. Then, our aircraft will be pulled to a dock, so the passengers can easily disembark. [I learned that some Captains made the mooring line pick up easy - others made it difficult.] We had a 2 hour layover scheduled - so the entire crew were taken to a fine hotel for lunch. It was fabulous - and we were free to order anything on the menu. Since Spanish was being spoken, I tried some of my college Spanish and was pleased at the result. It was an enjoyable experience - and I was pleased to be here.

The return flight was equally spectacular - and soon we were circling Dinner Key for the landing. Captain Fatt flew low over the terminal to avoid a long taxi back - and it thrilled the sightseeing crowd assembled on the terminal deck. There was a lot of excitement as the passengers disembarked - talking excitedly about the flight and of their purchases in Cuba. I realized then that Pan American not only provided a service - but was a tourist experience to be enjoyed. Wilma shared this arrival excitement - as she had come to meet our arrival. I enjoyed relating the day's events to her as we drove home - and I realized I'd had a really fun day - and I was being paid for it.

I made several flights to Havana - and all were very enjoyable for a day outing. I was practicing my Spanish - and having fun with it. I made some mistakes - one of which was rather embarrassing. I had asked for papaya - and it produced laughter. Then I was informed that the request should be "fruta de bomba" - as papaya was a woman's private anatomy. I never made the mistake again - but Americans must provide them with a lot of amusement requesting a papaya salad.

When a pilot returns to his home base, he is generally given a day off for every day away on a flight. Since our home was close to a park named Matheson Hammock - we could easily go there to swim, picnic, scuba or boating. We enjoyed many days in this semi-tropical park with palm trees and white sandy beaches.

I enjoyed meeting and working with the Pan American Captains that I was assigned to for my trips. Most of them were former Navy pilots that had many years of experience flying boats. Most were willing to share their experience and train the Air Corps pilots. In the air, we had no problems as we were pilots - but on the water - experience could mean a lot. We observed, and learned about getting the boat hull "on the step", the danger of cross winds on take offs and landings, the different forces on the hull for winds and currents, reading wind direction from surface waves, and to be ever vigilant about surface obstacles that might puncture a hull. Taxi to a mooring sounds simple, but wind and currents can make it a problem - and dangerous for the boatman holding the mooring line.

Captain "Red" Williamson was the best flying boat pilot I've ridden with. He reads the wind and water factors that exist - and takes off or lands the most ideal that's possible. He seldom misses making a buoy - although most boatmen are wary of his approaches. Mostly, he will taxi at high speed on the step after landing, maneuvering to go into the wind with his wing abeam the buoy line boatman - then chop the throttles. He rudders to go around the boatman and downwind - then he turns and lets the wind turn the aircraft into the wind and slowing, with the nose gently rocking by the boatman. To be sure he doesn't panic the boatman - he'll switch off the engines so the props are

fully stopped. He was a showman - and loved to impress his audience. Capt. "Red" was a raconteur "par excellence" and fascinated his listeners. Unfortunately, his stories were most often "dirty" - amusing the male listeners but embarrassing to any uninitiated females.

Capt. "Red" kept a "Black Book" that he readily admitted. He said that he had records on all the bosses that could give him trouble - so he was very independent. I was his room-mate on a trip to Belem, Brazil - when we were assigned rooms on the second floor - instead of quieter rooms on the fourth floor for quieter sleeping. Captain Williamson protested, but the Manager was unmoved by his warning, "If I don't sleep - we don't fly". That night, a noisy party, as well as a band playing till 2 AM, did make sleep difficult.

Early the next morning, we were called for wake up, and I got dressed, but Captain Williamson slept on. I told him it was near baggage pick up time - but he did not respond. Soon, the porters knocked on the door - and found "Red" still sleeping - and promptly went for the Manager. All distraught, the Manager came to the room inquiring why the Captain was not ready to depart. At that, "Red" sat up in bed, his eyes flashing fire and pointed to the Manager saying, "You son of a bitch. I told you yesterday that if I didn't sleep - the plane doesn't fly. When I get a night's sleep on the 4th floor room - then I will fly". Obviously, we weren't going anywhere that day.

Passengers and crew had another day in Belem. And, Capt. "Red" got his room on the 4th floor - and reported he slept like a baby. We departed a day late - with "Red" unconcerned - he had a "black book".

Another older pilot that matched Captain Williamson in flying boat technique, was Captain Basil Rowe. He was a modest, quiet person that everyone admired for his character. He was a gentleman in every way and willing to help anyone with a problem. He was not an exciting person, but a pleasure to fly with in any situation. I had many examples of Captains to shape the qualities that I would like to emulate - when I am in command.

By 1940, the Latin American Division, based in Miami, had flying boat routes throughout the Caribbean area - and into South America. The Ports of Call I visited in my S-42 flights were Havana & Cienfuegos, Cuba; Nassau, Bahamas; Baranquilla, Columbia; Colon, Canal Zone; Kingston, Jamaica; San Juan, Puerto Rico via Port au Prince, Haiti, and San Pedro de Macoris, Dominican Republic. From San Juan, we extended to Belem, Brazil - making stops at Port of Spain, Trinidad, Georgetown, British Guiana, and Cayenne, French Guiana.

I remember the following experiences during my co-pilot days 1940 - '41 flying the routes out of Miami.

1. Nassau, Bahamas - was one of our shorter flights out of Miami and very popular with U.S. tourists. The S - 42 and the S - 40 were used - flying at a low altitude to show the passengers the en-route sights - i.e. the changing color of the Gulf Stream, the northern tip of Abaco Island, and the incredible

blue of the water, and the white sand of the beaches around the Bahamas. The harbor water at Nassau was incredibly clear - appearing to be 6-10 feet deep, but actually was about 30 feet by test. After arrival at Nassau, we had a 3 hour layover, before our return schedule. Someone of the crew was assigned to security duty for the aircraft - and I often volunteered to stay aboard. A lunch was provided - so in the 3 hours, I could swim, have lunch and a nap. Not bad duty.

2. Havana, Cuba - I made many flights to Havana, Cuba - which made a pleasant day's activity. The en-route scenery was attractive - and the harbor landing an interesting challenge. Lunch was always super - and I could practice my Spanish on the waiters. Shopping was available but I usually bought only rum and guava paste. I liked the guava paste for breakfast on toast or rolls. Unfortunately, I never had an overnight in Havana. It was reputed to be a tourist attraction for night clubs, casinos, and restaurants - and shopping until late hours.
3. Cienfuegos, Cuba - Due to thunderstorms in the Miami area - our flight was forced to overnight. The town was not much - and the hotel was second class (or third), but it was the best available. After I went to bed for the night, I was aware of insect bites, in spite of the mosquito netting. Turning on the light, I found my bed crawling with bedbugs. Ugh. My solution was to take the mosquito netting down and spread it over the bed - tying the ends to the bed posts. I slept on top - hoping the bugs could not reach me. Sleep was fitful - so I was happy to leave the next day. The only good memory of Cienfuegos was the excellent rum selling for 80 cents a liter
4. Barranquilla, Columbia - It was a city located about 20 miles inland from the north coast on the Magdalena River. The river had a swift current - and often whole trees could be seen in the muddy waters - requiring extreme vigilance when landing. Landing and being towed to the dock was often a tricky maneuver. Many of our passengers were going on to Bogata - that they reached by a land plane - operated by Columbian Nationals. Officials at Barranquilla always appeared unfriendly - and rebuffed my attempts at Spanish - so it was not my favorite stopover.
5. Colon, Canal Zone - We had permission to overfly Cuba en-route Miami to Colon - passing Cayman Islands just south of Cuba. It was a long distance after Cayman - with no en-route landmarks. But, the tropical winds were generally light, with little drift. The Central America coast was just west of us - and for the last hour to Colon we could home in on a radio beacon. Arriving overhead, it was always exciting to see the Isthmus Canal stretching into the distance. Two things I remember about Colon were: 1. The military presence of U.S. troops, and 2. the fantastic buys at the Duty Free shops. At the Captain's suggestion - I bought perfume from India called Delabहार. Wilma was very pleased with it.

6. Kingston, Jamaica - Jamaica is a beautiful island south of the eastern end of Cuba. The black people are attractive, intelligent and very friendly. In the northeast corner of the island is a 7402 ft. mountain - on which they grow excellent coffee. Tourism was encouraged, but facilities were lacking in 1941. Kingston Bay is extensive and presented no problems to select a line of flight to land there. When overnighing, we stayed in a very British-like atmosphere hotel. The service was excellent, food good, and the fruits outstanding. I made one unfortunate choice at dinner when I ordered a duck entrée. I could not eat it - and found out later that they let it ripen in the sun. (Maybe Captain Horatio Hornblower likes it - but I do not.)
7. [Typical flight - Miami to San Juan, Puerto Rico via Port au Prince, Haiti.]

Port au Prince, Haiti - The Miami departure was early - and after leaving the Florida coast - Andros Island would be our first check point on our left. Later, ahead of us the eastern end of Cuba would come into view . After passing that check point, we had the big open bay at Port au Prince in view - and prepare for a landing. The prevailing wind was from the west, so we overflew the city before turning back to the west. We could see the swells rolling in from the open sea, so we flew low over the city to land close to shore before the swells. As usual, we got smacked with one swell before we could slow to taxi speed.

During the transit, the flight engineer reported that there was maintenance to do on an engine that was throwing oil. That meant a delay - and that delay finally extended into an RON (Remain Over Night).

Passengers and crew were taken to the hotel that was not First Class - but quite adequate. The trip through town was a revelation of the country's poverty. The black people were poorly dressed and not healthy looking. The roads were full of ruts and the buildings poorly constructed. The native people stared as we drove or walked by - being curious of our all white group.

Shortly after we were registered at the hotel, the Captain received a message from Haiti's Presidents office that our crew was invited to a Presidents Ball being given that evening. For protocol reasons , the Captain urged that we all attend. It was an honor to be invited and we looked forward to an interesting evening. It was held at an outdoor garden pavilion, for dinner and a dance. The food was excellent - and the band played American dance music. When we were asked to come meet the President, he was very gracious, and asked the Captain to remain to talk. After the crew returned to our table, a messenger came to me and asked if I would dance with the President's daughter. And, of course I would be honored. She was very black, but quite pretty, and about my age, I'd guess. Our efforts were not well coordinated, but passable. Protocol was satisfied - and I thanked her for the dance. It was the first time I'd danced with a black lady, so I felt very international.

Our crew asked to be excused early, due to a 4 AM call the next morning - for the flight to San Juan. Our take-off was scheduled for first light. The Skipper opened the throttles as soon as we could spot the swells in the distance - and charged down the bay. We began to feel the initial swells and just as we approached a larger one - we flew off the top and into the air. My knuckles were a little white.

Our early departure for San Juan was due to a plan to continue us to Port of Spain - and regain our scheduled arrival there. For the same reason, we were passing up our usual landing at San Pedro de Macoris, Dominican Republic. It was a scenic flight over the mountains of Haiti and Dominican Republic - and soon we were leaving the east coast - with Puerto Rico coming into view. We descended to 2000 ft. to fly east just off shore of the north coast of Puerto Rico. The passengers always enjoyed the scenic view while flying at a low level.

The landing area in the San Juan harbor is somewhat restricted, but the water is well protected and smooth. Our approach was close by an old fort built to protect the harbor in time past. Soon we were landing and connecting to our mooring line - and being towed to the docking ramp. Most of our passengers disembarked - as San Juan is a popular tourist stop for Americans. The aircraft was serviced for the next leg of our flight - and within an hour we were ready to depart.

San Juan, Puerto Rico to Port of Spain, Trinidad.

(Before any departure of a flying boat, it must be determined that the aircraft is balanced for proper flight characteristics. For the S - 42, after the passengers and cargo load is determined - and the fuel load added - it may be out of balance. If so, balance is regained by pumping sea water into a tank in the bow of the plane. This added weight must be included in the maximum allowable weight for take-off).

Our forecast weather showed excellent conditions along our route - so we expected an uneventful flight. After the launch checked our take-off path, we started our take-off toward the north. After becoming airborne, we flew out the harbor mouth, and turned east to fly around the end of the island and a Navy restricted area. Then, we could turn on course (160 degrees) to take us over St. Croix (U.S.). Off to the left, we could see St. Thomas (U.S.) - both islands being a part of the U.S. Virgin Islands. Our route was just west of the Lesser Antilles chain of islands that we could see well at 8000 ft. They have mountains on the islands that ranged 3-5000 ft. and were plainly in view. They rise so steeply that most have roads only around the shoreline perimeter. Flying north to south, we pass St. Kitts (UK), Nevis (UK), Monserrat (UK), and the Guadeloupe Group (FR) - all identified as the Leeward Islands. Passing the 15th north parallel, we flew by the Windward Islands of Martinique (FR), St. Lucia (UK), St. Vincent (UK), and Grenada (UK). With a background of the various blues of the Caribbean waters, blue with white clouds of the sky, the dark green islands ringed with white surf looked very

inviting. [Later, I will have an opportunity to visit some of these islands - while in command of a two engine S - 43.] On the surface, we could see a number of sailing vessels. It was not surprising - since the Caribbean area is ideal and a favorite for private and commercial yachts. Soon the big island of Trinidad comes into view - and we start a slow descent. With excellent visibility, we are able to make out, to our south, Peninsula de Paria - off the coast of Venezuela. The harbor at Port of Spain is large, but unsheltered - so the seas can sometimes be rough. Today, the sea is calm - with a light westerly wind. It is ideal for the co-pilot to get a landing - and the Skipper turns to me and says, "You have got it". I continue toward the city, dropping low for a passenger view, and then turn right toward the bay and land close in on the bay for a smooth touchdown. He even let me taxi in to make the mooring - sending the flight engineer to the bow to catch the line. All went well - and the Skipper said, "Nice". It made my day.

Our trip through the city to reach the hotel, gave us quick glimpses of colorfully dressed black natives with smiling faces. The streets were well kept with well maintained buildings along them. Colorful baskets and tables of fruit and vegetables were being sold on many corners. Port of Spain was going to be fun to explore.

The hotel was beautifully situated among palm trees and tropical plants. It was an old wooden structure that gave hints of being historical. The bedrooms were large and airy - with a bed and mosquito canopy That was necessary because the doors and windows were open to the fragrant balmy tropical air. There were overhead fans to move the air - and made it quite comfortable. Daytime and in the sun, it was hot - although there was often a sea breeze blowing.

Our dinner was excellent - with red snapper fish, and fresh vegetables grown locally. Dessert was flan - a custard with a dark sugar syrup. It is served all through the Caribbean area - and had become a favorite of mine. During the meal, the diners were entertained by a Steel Band group wearing colorful costumes. They made melodious music by using mallets to softly strike the tops of steel drums that had been shaped to produce different notes. It was most entertaining.

After dinner, we walked the neighborhood, encountering natives who acknowledged us with a smile. Music was heard in the night from several directions - creating a very pleasant atmosphere. It was the tropics - and I loved it.

Flight Extention - Port of Spain, Trinidad to Belem, Brazil via en-route stops at Georgetown, British Guiana, and Cayenne, French Guiana.

All take-offs on Pan American planes were generally at Sunrise since we had to make our destination by Sunset. Flying boats did not normally fly after dark due to the danger of impacting flotsam on the water - resulting in damage to the hull. When necessary, or in an emergency, a lighted line

of buoys would be placed to indicate a safe landing area.

Departure from Port of Spain was the usual first light when visibility permitted a safe take-off. A beautiful tropical sunrise showed clear weather with excellent visibility. As soon as we had gained a thousand feet altitude, we turned on course - to cross the southwest corner of Trinidad. We continued climb to 6000 ft. cruise altitude, crossing the Serpents Mouth body of water to the coast of Venezuela. We could follow the coast to Georgetown, British Guiana. En-route, we crossed the wide Orinoco River mouth delta that upstream had been joined by several smaller rivers. That included the Orisini River coming from Angel Falls - that started at 9688 ft. and dropped to 3212 ft. The Angel Falls was located in the Guiana Highlands - mountain area 300 + miles south and oriented southeast-northwest. Seeing Angel Falls was an ambition never realized, but getting there is no simple planning.

Past the Orinoco River delta - we soon crossed the border of British Guiana, and continuing along the coast we arrived town of Georgetown, located a few miles up the Essequito River. The town was small and moderately prosperous.

The river was relatively free of boat traffic, so we had no delay or problem making our landing. The wind was light and slow current in the river - so making our mooring was easy. We had a few passengers disembark - and a few were waiting to join us. Coca Cola was served to our passengers as a courtesy - and on a wall of the station was the statement, "Georgetown water rated the most ideal for making Coca Cola". It may have been the water - regardless, it was very welcome in this tropical climate.

Within an hour, we were taking off to continue our route southeast. Soon we were crossing the border of Surinam (Dutch Guiana) - and on to overhead the city of Paramaribo. We were not landing - and soon were crossing the southern border with French Guiana. In about an hour, we were arriving at the city of Cayenne - and made our landing on a narrow dark river just south of the city. We made the mooring - and then towed to a barge with a small office that read "Pan American Airways". It was a modest terminal. When the hatch was opened, the smell of newly cut wood was strongly evident - coming from a near by sawmill. Refueling was started - and I was surprised to see that it was pumped by hand from nearby barrels.

I learned some more interesting facts about the area - during our transit. The famous "Devil's Island" was located just off the coast - and several of the maintenance employees were "libres" from the island. One was quite an artist - and offered beautiful carvings for sale. (On the return trip northbound, I bought a leatherwood carving of a Panther, for two dollars and a carton of cigarettes. Today, I prize it very highly.

We were just on our sunset time deadline for Belem, as we made our take-off from Cayenne. We had 420 mile flight to Belem, Brazil that we estimated would take about 3 hours. The weather was becoming cloudy -

and some thunderstorms evident. Fortunately, we did not have to divert to dodge them - adding to our flight time. After a couple hours, the Amazon River delta came into view - and it was so wide that we were 30 minutes flying past it. It was a fascinating sight with the many outlets - and our passengers seemed equally curious. The sun was getting low in the sky - and it was going to be a race to the Belem landing. We sighted the wide Bay of Marajo that extends inland many miles. Belem was on the south side - and we barely had time to reach Belem -and make a circuit of the area to check for obstacles. We were just touching down as the sun dipped below the horizon - for a dead heat arrival. By the time we arrived the hotel, it was quite dark. We had our dinner, then an early bed - as it had been a long day. Happily, we have a day off tomorrow, before we start back northbound.

I was eager the next morning to go sightseeing. Belem is so located to relate to inland agriculture - as well as being a port city for commerce. A walk to the waterfront revealed a busy port for small boats of upriver traffic - and some big ships with foreign flags. Our Pan American terminal was in view - and apparently the only airline with flying boats to serve the area. (Land planes serve the internal flights of the country.)

Walking back to the hotel - I passed a man carrying a large snake (Anaconda) on his shoulders and was being given a wide berth. The snake was so long that its tail touched the ground on one side - and the head on the other except for raising it to avoid hitting. Apparently, there is a market for the snakes. Snake skins are for sale - and I bought one for its length - and it hangs in our Oven Point Camp Room. Another item I bought, was matching book end carvings of native Indians.

The story of how local persons capture Anaconda snakes was fascinating to me. They are water snakes found in the Amazon River, but will come ashore in search of food. So, a young goat will be staked out near the river - where it will cry out for its mama. The snake is attracted to the crying goat - seize it and start to swallow it. Being heavy with the weight of the goat, it cannot move very rapidly. At that moment, the snake hunters rush forward to throw lines over the snake to hold it to the ground - and capture it. With proper timing, the hunters are able to withdraw the goat while still alive - thus saving it for use on another hunt. When I commented on the cruelty of such a deed, the Brazilian man shrugged and said, "Oh the goat is all the more fearful - and cries out even better".

Our flight left Belem with the same early departure - to make the same stops northbound. If all goes well, we will be back in Miami in three days. We were on schedule our third day, but when we arrived the Miami area, it was overcast with thick clouds. Our Pan American operations office reported that the cloud base was 700 ft. and 5 miles visibility. There was a non-directional radio beacon to locate our base - so when we overhead that beacon, the Captain planned to descend through the clouds by a system called "boxing the beacon". It worked this way. The flight approaches

the beacon and determines when overhead - and continues ahead one minute. Then a turn of 90 degrees is made to the left - and go one minute. Then, make a 90 degree turn left - and go one minute (at which time the beacon should be abeam on the left) and go one more minute ahead. (One side of the box is established). Make a 90 degree turn left - fly one minute to abeam and continue for one more minute. (The second side of the box is established). Turn left 90 degrees, fly one minute to abeam and continue one more minute. (The third side of the box is established). Turn left 90 degrees, fly one minute to abeam, continue one minute more. (The fourth side of the box is established). By precise flying - and timing the abeam - the wind factor can be established - and flight legs adjusted for it. Continuing to fly the box around the beacon - descent can be made in a safe area until we descend through the clouds to ground visibility contact below.

The Skipper demonstrated some precise flying - and I helped by close observation of the time. The box was established - and descent started. We made three boxes around the beacon to descend 6000 ft. and broke out of the clouds at the forecast 700 ft. The Skipper visualized our position in the box - and with minimum maneuvering set us on course for a landing in the bay by the buoy line. "Boxing the beacon" was a first for me - and was a good lesson learned, taught by a great teacher. It was a week of great adventure. When Wilma picked me up at Dinner Key terminal, I had lots of stories to relate on the way home - and a few days after.

Being gone for a week, I was eagerly looking forward to my 7 days off. We had been wanting to explore south Florida - and so decided to drive the Florida Keys highway to Key West. We took our camping equipment - planning to stay at State Parks - or even a remote key island along the way. In 1940-41 the keys was a very remote area - with few commercial stores and homes. There were no hotels until one reached Key West. There were a few campers and fishermen using this pristine area, and we joined them for some great scenic campsites. Key West was a remote city - at the end of a long drive. It was being promoted for tourism, but was not all that popular yet. The Navy base provided a good number of service men in uniform - but even that was limited. I remember excellent seafood meals at the Key West restaurants. It was a great six day outing - and remember it as a "special" one.

Spring 1941, I was scheduled to qualify on the S-43. It was built by the Sikorsky Company and was a small version of the S - 42. It had two engines and wing floats. It was well designed - and was used to fly into the small harbors of the Caribbean islands. I took my ground orientation - and then had a flight of 3 take-offs and landings - and then ready for co-pilot assignment. The crew consisted of two pilots, radio officer and a steward. It carried only 16 passengers. Since there was no flight engineer, the co-pilot assumed those duties.

My first co-pilot trip on the S - 43 was scheduled to San Juan and return. The day before the scheduled flight, my duty was to check the aircraft for

mechanical readiness - and to review any additional info. with the ground mechanics. I found only one item to question - that was the size of the safety wire on the Fire Control handle. The mechanic said that it was standard, but why didn't I test it to confirm it was right. I did - and found I needed two hands to break the safety wire, so I could activate the handle. In case of an engine fire, any delay might be critical - so he said he would change it for tomorrow's flight.

The flight left the next day on schedule - and had a routine flight to San Juan, Puerto Rico. En-route, I happened to notice the engine Fire Control Handle was safety wired with the same oversize wire that was supposed to have been replaced. It was not a critical item, so I wrote it up for Miami Maintenance on our return.

However, on our return flight the next day, and an hour out of San Juan, the Engine Fire warning went off - and we noted smoke at the engine. On the Captain's command, I reached for the Fire Handle and pulled it though the safety wire with ease. That action cut off the fuel to the engine and activated the fire control to smother any flames. The fire went out - but now we were operating on one engine. While the S - 43 flew well on one engine, our safety factor was affected. So, the Captain elected to land at nearby San Pedro de Macoris that was close by - rather than returning to San Juan or continuing to Port au Prince, Haiti. (En-route to San Pedro, I thought that my concern about oversize safety wire was groundless - or did adrenaline help my action.) We were a little tense about the one engine operation, so when the bay came into view, it was a relief. The Skipper made a superb landing and we were safely down. The launch came out to take us in tow - and soon we were at the dock and passengers unloading. Pan American Miami was advised of our situation - and informed us that a spare engine was available at San Pedro de Macoris - and we were to change the engine and ferry the plane to Miami when it was ready. Another Pan American flight would be diverted to pick up our passengers.

I was slow to realize my predicament. The Captain asked if I was capable of changing an engine - and I replied, "No". His response was, "It may take you a little longer then - but it is your responsibility". Then, he left - saying he could be reached at the Station Manager's house. (Rank does have its privileges - but he should have remembered that he was to fly the plane to Miami.) I seriously questioned that I could do this job - as my mechanical skills were limited - and I had never changed an engine in my life. But, I remembered the words of my father - "Start a job - and you're smart enough to figure out what to do next".

First, I got a pair of overalls - which the Station Manager supplied - and he offered two workmen to help me. Next, it was obvious the propeller would have to be removed. That meant that an A- frame would have to be constructed to support the prop when removing it from the engine. My workers went off to build the A - frame while I worked on the propeller.

When they returned with an excellent A-frame and a chain hoist to support the prop. - I had the prop nearly ready to remove. We were working from a floating dock - that was a bit unsteady and water close by. But it allowed us to set the A-frame in perfect position to receive the propeller. Finally, we were ready - with A-frame in place and the chain hoist supporting the prop. We tried easing the prop off the engine - with manpower to control the supporting A-frame. No go - the prop seemed loose - but it would not slide off - despite all our efforts. We tried every idea proposed - but it would not come off. We wired Pan American - Miami asking for any suggestions. Their reply was, "Did you remove the rod on top of the bell housing - that locks the prop to the engine"? Rod? What rod? We went back to look - and sure enough - there was a bolt head that might have a rod on it. I removed it - and sure enough, a rod was attached - and now I understood its function. We would try again with the rod removed.

Having struggled before with the prop - this time we used too much force to move the prop. It slid off easily - and our force moved it too far - and we damned near threw it forward and off the barge into the bay. It was a horror moment - and for a few seconds the control was in doubt. Finally, it was stopped and we quickly got it back upright and under control. Then, the prop was lowered to the barge deck - and our relief was evident. To celebrate, we went to lunch.

Now, to change the engine. For me, it was going to be a first - and I had given it lots of thought. I would assemble as many different pieces of colored cord that was available. My plan was to use these to tie a matching cord on each side of a fitting as it was disconnected from the old engine. It could then be used as a guide when we reassembled the new engine. I did not want any electrical lines or fittings left over when the job was done. (When my story was told at a later date - it brought smiles of amusement to real mechanics - but the system worked. Anyway - where were they - when they were needed?)

We disconnected, tying the matching cords as we worked. The job was going along well. Finally, we had everything disconnected - and identified. Four bolts held the engine onto its supports - so we readied the A-frame and chain hoist to receive it. The bolts were removed - and carefully, carefully lowered the engine to the barge deck. As I looked around, I noticed the Captain on the shore - and he gave me a "thumbs up". It looked like he had a cold beer in his hand.

The replacement engine had been brought to the dock - and we started to reverse the process to install it on the plane. Up went the engine on the A-frame lift - and with some maneuvering lined it up with the installation bolts. Finally, it was in place - and secured with safety wire. Now, to make the connections. My color code identification worked like a charm. I identified the fittings - then let my fellow workers make the connections. I was even beginning to relax. Finally, the engine job was done, and not a line or wire

was left over. Was I smug at that moment? You bet I was.

Now, we could lift the prop onto the engine - using the A-frame hoist to put it in place. The bell housing bolt was installed - and then the prop connections secured. The job was complete - the test yet to come. It had taken three days - but some time was needed to educate the co-pilot / Mechanic on the job. When we were ready to start the engine, I was a bit anxious. But, it started and ran perfectly. Now, we were ready for the flight test.

The Captain decided that we would flight test - and, if all tested satisfactory- we would continue on to Miami. We loaded our personal gear aboard - hoping that all would go well. The engine developed full power on the take-off - and ran smoothly - so the Captain was satisfied. We set course for Miami - and enjoyed an uneventful flight - both engines running perfectly. No one ever said to me, "Well done". However, I was satisfied that I had advanced a step in self esteem - and had done it "My Way". My Dad had given me some good advice, "Start - and you'll be smart enough to finish it."

OUR FIRST CHILD IS BORN

Our first child was expected, and his birthday was June 9, 1941, born at the Coral Gables Hospital. Wilma and I had discussed possible names - and I thought we had settled on a different name- but she informed me that she had settled on Robert Chester Evans, Junior. She did it because she thought I would like it - and she was right - I was very proud. A child would change our lives a bit, as now we were a family. Wilma's sister Janet came to visit and help Wilma cope with a child. Neither professed to be very knowledgeable about babies, but they experimented successfully - and the baby thrived.

A sobering happening occurred at our "old Spanish house" in Coconut Grove. It was built close to the ground, with lots of vegetation growing close by, especially rustling bamboo trees. That semi-tropical vegetation probably contributed to the ability of a snake to enter our house. It was not discovered until we moved the playpen where the baby was lying. Then it was sighted beneath the playpen - now trying to escape. I managed to kill it before it escaped into the house, as that was unacceptable. That proved especially so, when later the color bands on the snake confirmed it was a very poisonous Coral Snake. The implications for its proximity to the baby were awful to contemplate. As you can imagine, we were a little overprotective for a while, but no more snakes were found in our house. Soon the matter of snakes in our house in Florida became a moot point - the rumor was that a transfer to San Francisco was imminent.

1941 - CO-PILOT PAN AM - PACIFIC

Co-Pilot Transfer to Pacific Division, San Francisco, California.

September 1941 - After a year of flying the Caribbean and South American routes, I learned that I would be transferred to the Pacific Division, located in San Francisco, California. My flights would be on the Boeing - 314 and the Martin - M 130 (a.k.a. -The China Clipper) - commanded by the most senior and experienced Captains. The routes flown were to Honolulu, Hawaii - then divided into the South Pacific routes to New Zealand and Australia - and the Western Pacific routes to the Philippines and Hong Kong, China. The prospects thrilled me to the limit.

Late September 1941, Wilma and I, and our 3 1/2 month old son, Robert Jr. (Robbie), departed Miami - to drive to San Francisco, California. We were allowed ample time en-route, so we planned to diverge to Michigan to see our families - and to show off our new son. That was a very joyful visit with our families, as we had been away for a year, or more. This was especially so for the Acker family, who finally met their first grandchild. All too soon, we had to say good-bye, as our time was limited to report for duty. We drove long hours and I remember the 100 degrees heat as we crossed the plains states. Open windows provided only a breeze relief. Wilma was uncomfortable, but uncomplaining, as she nursed a fretful baby during that heat period.

Soon, we were out of the heat of the plains and into the Rocky Mountains. We marveled at the mountains, and the red rock country of the west. After five days, we finally crossed into California - through Sacramento - and finally to Oakland. Our motel was near San Francisco Bay - and Treasure Island - where I would report to Pan American. It was a fabulous location on Treasure Island - right in the middle of San Francisco Bay - and was reached from a roadway off the San Francisco - Oakland bridge. The panoramic view was incomparable - including the bay, San Francisco city, and the Golden Gate bridge to the west. For flight operations, it was a perfect site - providing unlimited take-off space in any direction. I was excited and impressed - and very happy to be here.

After reporting to the Chief Pilot office, I was given time to find a home and get settled. We found a very nice house on a hillside street in Berkley. It was modest but solidly built, providing lots of space for our family - and had a garage below. It had a backyard that was shady and private - inviting for outdoor living. Robbie was to spend many happy hours in that yard. The University of California was close by and we enjoyed visiting their campus. It was convenient to stores - only two blocks away, so we could walk. We found a wine store where you could bring your own bottle to be filled. Ordinary red or white wine sold for 25 cents a bottle - or Premium wine for 30 cents a bottle. We bought the cheaper - not recognizing any great difference - and besides 5 cents was 20% of the cost of a movie. We have very pleasant memories of our Berkley home.

I was eager to report to Pan American and see what was in store for me. My first morning was spent visiting offices and meeting personnel that I would need to know for my operations flying. After lunch, a Pacific Division co-pilot volunteered to guide me

"THE GREATEST FLYING BOAT"

BOEING 314

(Shown on the next page)

Statistics: (Built by Boeing Aircraft Company)

Length - 106 FT. - Span - 152 FT. - Height - 28 FT.
Take-off Gross Weight - 82,500 lbs.
Power - 4 Wright Double Cyclone (1500 H.P.)
Speed - 180 M.P.H.
Range - 3500 Statute Miles
Seats - 74

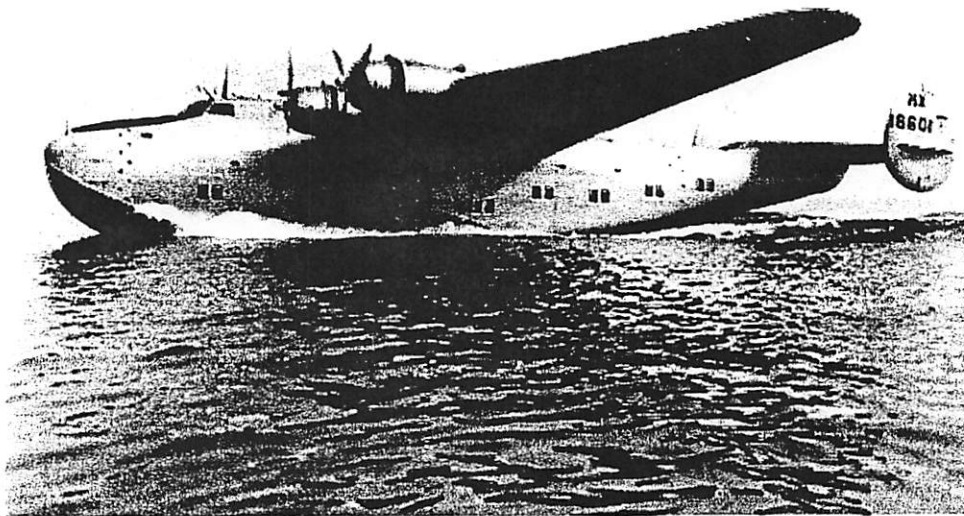
With an eye on the Atlantic Ocean crossing, Pan American prepared specifications for a flying boat capable of large loads on longer equivalent ranges - due to strong headwinds on the Atlantic. Boeing Aircraft Company won the competition - and Pan American signed a contract for six - at a cost of \$550,000 each. Boeing had problems with a single vertical stabilizer. It tried a twin-tail arrangement but finally settled on three fins that became its identifying feature.

The Yankee Clipper inaugurated the worlds first trans-Atlantic scheduled service on May 20, 1939 - carrying a ton of mail on a flight from New York to Marseilles, France via Azores and Lisbon, Portugal. Mail service to Southampton was opened June 24, 1939. Passenger service on the North Atlantic was started June 28 - with 22 passengers paying \$375 for a one way flight - or \$675 for a round trip.

The Boeing 314 was used very successfully on the Pacific Ocean flights 1939 - 1945. It continued to serve on the North Atlantic Ocean flights during 1939 - but was abandoned at the outbreak of the Second World War. Flights across the Atlantic were continued via the Mid-Atlantic and South Atlantic route to Africa - on to Marseilles, France. The Pan American fleet of Clippers were utilized for War duty in both Atlantic and Pacific areas.

An epic Round the World western flight of a Pan American Boeing 314 in the Pacific was made in January 1942 - when its return eastward was made impossible by the war with Japan.

BOEING - 314 (Copilot '41) Pan Am - San Francisco, CA. "Luxury flights - Pacific".



As airplane travel became popular during the mid-1930s, passengers wanted to fly across the ocean, so Pan American Airlines asked for a long-range, four-engine flying boat. In response, Boeing developed the Model 314, nicknamed the "Clipper" after the great oceangoing sailing ships.

The Clipper used the wings and engine nacelles of the giant Boeing XB-15 bomber on the flying boat's towering, whale-shaped body. The installation of new Wright 1,500 horsepower Double Cyclone engines eliminated the lack of power that handicapped the XB-15. With a nose similar to that of the modern 747, the Clipper was the "jumbo" airplane of its time.

The Model 314 had a 3,500-mile range and made the first scheduled trans-Atlantic flight June 28, 1939. By the year's end, Clippers were routinely flying across the Pacific. Clipper passengers looked down at the sea from large windows and enjoyed the comforts of dressing rooms, a dining salon that could be turned into a lounge and a bridal suite. The Clipper's 74 seats converted into 40 bunks for overnight travelers. Four-star hotels catered gourmet meals served from its galley.

Boeing built 12 Model 314s between 1938 and 1941. At the outbreak of World War II, the Clipper was drafted into service to ferry materials and personnel. Few other aircraft of the day could meet the wartime distance and load requirements. President Franklin D. Roosevelt traveled by Boeing Clipper to meet with Winston Churchill at the Casablanca conference in 1943. On the way home, President Roosevelt celebrated his birthday in the flying boat's dining room.

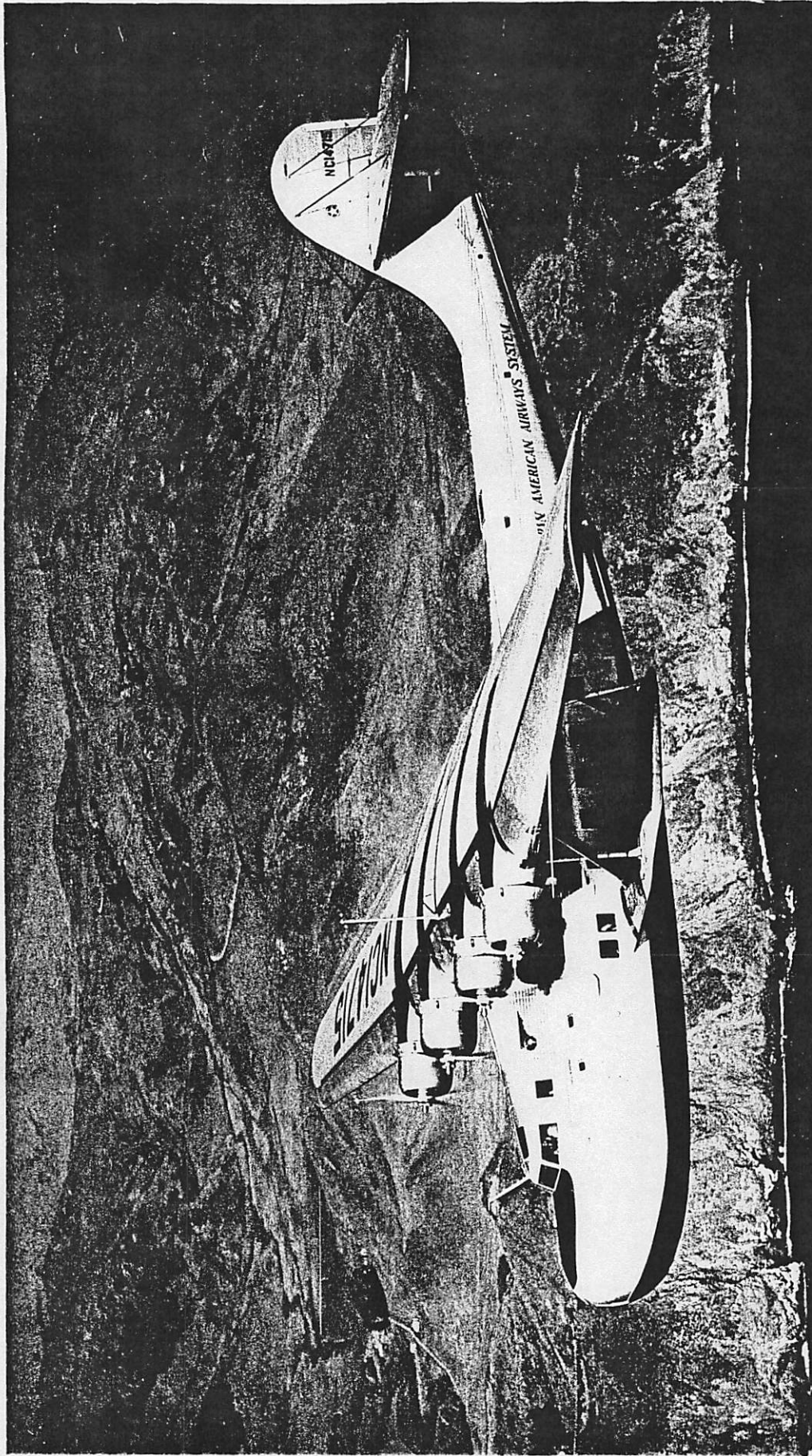
MARTIN M - 130

(Shown on the next page)

Statistics: (Built by Martin Aircraft Company)

Length - 91 FT Span - 130 FT Height - 25 FT
Take-off Gross Weight - 52,250 lbs
Power - 4 Pratt & Whitney Twin Wasps (830 H.P.)
Speed - 130 M.P.H.
Range - 3200 Statute Miles
Seats - 41

Specifications for a long range flying boat were issued in 1931 by Pan American. Martin Aircraft Company developed the Martin M - 130 and eventually, Pan American ordered three, at a cost of \$417,000. They were named Hawaiian Clipper, Philippine Clipper, and the China Clipper - as the elegant craft captured the aesthetic imagination and memory of the early sailing ships. They served to open the conquest of the Pacific Ocean - dating from the inaugural flight of the China Clipper November 22, 1935. The flight departure was from San Francisco to Honolulu; onward to Midway Island; onward to Wake Island; onward to Guam; and arriving Manila November 29th. The five legs of the flight comprised 8210 miles - in 59 hrs. 48 min flying time. It was an epoch-making flight. However, due to the fuel load required - passenger loads were highly restricted to as few as eight on the long California-Hawaii segment.



MARTIN - 130 (Copilot '42) Pan Am - San Francisco, CA. "China Clipper" (Capt. 1944)

around the facilities - to get acquainted with the pilot ground school rooms, the Medical office, and into the hangar to see and identify the aircraft used on Pacific flights. There was a Boeing 314 and the China Clipper in the hangar. They looked huge - and I was in awe at the thought of flying them. But, that flight concern was some time away - as I learned that my duty aboard entailed being responsible for the mail and its stowage, to secure the bowline when approaching a buoy after landing, and cockpit duty to relieve the Captain or First Officer during flight.

Before flight assignment, I must attend ground school, to be informed of my duties aboard a flight, the emergency equipment, and the operating systems of the B - 314. The statistics of the B - 314 were impressive for its time - weighing 83,500 lbs., with a wing span of 152 ft. The wing chord was thick enough to permit crawl space out to the engine - and behind the engine - height enough for a mechanic to stand to work on the accessories of the engine. It carried four radial engines (Wright Double Cyclone) on the wing that extended from the top of the fuselage. On the bottom of the hull, were sponsons, that appeared like two short wings, that were used for flotation to keep the aircraft upright on the water - and for some fuel storage. The empennage had three vertical fins for flight stability. On the water, the B - 314 looked ungainly, but once airborne, the aircraft had the beauty of a large waterfowl.

The cockpit, on an upper deck, was reached by a circular stairs - and had stations for two pilots, flight engineer and a radio operator. Behind the cockpit was a large area that accommodated the Navigation table, crew bunks, and mail stowage. The crew consisted of four pilots (Capt., First Officer, Navigator, and a relief pilot), two flight engineers who controlled the mechanical equipment and the fuel management, radio operator for CW code, and the Flight Service team of Purser and three stewards. The main deck, for passenger accommodation, had compartments seating eight passengers each. These were Pullman design, that made up into bunks for night-time sleeping. Forty passengers could be accommodated with bunks. There were Men and Ladies wash rooms - large enough for changing clothes. Other compartments were a large lounge that converted to a Dining Room., the Galley, and storage in the bow.

The Galley prepared gourmet meals, that were served at tables in the Lounge. The tables were set with linen tablecloths, sterling silver tableware, china dishes and crystal water and wine glasses. Fresh flowers were set at every table. Luxury was the philosophy for the passengers - as we were in competition with ships. Flying across the oceans was still considered adventurous, but we offered luxury with the pioneering.

When my ground school was completed, I was assigned to the crew for several aircraft test flights. This allowed me to familiarize myself with the aircraft and the crew routines - and to practice catching the mooring line from a B - 314. Then came the day when I was scheduled for a flight to Honolulu. The departure routine actually begins the day before the flight. We report to Pan American for the Captains briefing - at which the crew is introduced, and the Captain will outline how he conducts his flight. (I learned that nearly all Captains are ex-Navy and maintain strict authority. The law of the sea prevails - even though we are a couple miles above it. His is the final word - and is not to be challenged - and the reason is responsibility that is his alone.) After briefing, we report to Medical to confirm we are physically fit for the flight.

On the following day, flight departure is scheduled for 4 PM - with the crew reporting at 2 PM. The two hour interval is to insure adequate time for any last minute problems that might arise. The flight engineers especially need to confer with ground maintenance concerning the aircraft status. One hour before departure, the crew assembles and forms a column of two, to march in a military manner to the aircraft, led by Captain and First Officer. A band is on hand to provide march music & a happy atmosphere for the passengers during the boarding process. It is very similar to a ship sailing departure. After the passengers are boarded, the final scenario is the Captain receiving the Ships Briefcase with all the official papers.

With everyone aboard, the hatches are closed and the signal given for engine starting. When the engines are running, the Captain will signal for the lines to be cast off. When "lines off" are confirmed, the Captain will start his taxi. The prevailing wind is out of the west - so we proceed slowly toward the Oakland shore on the east side of the bay. En-route, the engine magnetos are checked for dual functioning. (Two per engine)

As we neared the east shore, I was surprised to see the shoreline crowded with people and cars. Then, I realized that the Pan American Clipper departure was an event, and would be reported in the evening newspapers. Close to the shore, the Captain let the aircraft swing into the wind. The cabin team was advised to be seated. When the launch confirmed the take-off area was clear, the throttles were advanced to start the take-off. Being at maximum gross weight, the hull was deep in the water, and the aircraft was slow to respond. As the speed increased, the Captain raised the bow of the aircraft, and then let the hull settle onto the "step". Now, the aircraft accelerated rapidly and was skimming the water. As the Clipper reached take-off speed, the Captain raised the bow higher to break free of the water - and start his climb - streaming the hull water in a beautiful display for the ground spectators. After reaching 500 ft. the Captain made a slow climbing turn of 360 degrees inside the bay area, giving the passengers a spectacular view of San Francisco , Oakland and the bay area - and then headed to fly over the Golden Gate bridge.

Crossing over the bridge, the Navigator noted the time for his chart log. The flight was forecast to take 18 hours and 37 minutes - which is about average time for the flight. The distance was 2420 nautical miles - San Francisco to Honolulu. The Captain chose the altitude of 8000 ft - and we would fly at a speed of 150 mph into an expected headwind of 20 mph - for a ground speed of about 130 mph. That would give us an expected arrival time at Honolulu about 7:15 AM tomorrow morning.

The route we would follow was recommended by the Meteorologist to take advantage of the most favorable winds. That was seldom a direct flight, but instead be a dog-leg route - giving us the least time en-route. But, it was only the Meteorologists best guess, since he had minimal information upon which to make his decision. However, the aircraft track would be continually monitored by the Navigator - as he attempted to follow the selected route. For the first 100 miles, radio bearings on San Francisco could confirm our track. After that, navigation was determined by celestial sights on the stars and other heavenly bodies , observed through an Octant. (Our navigation was the same as a ship at sea.) If the sky was clear, sights were taken every hour, to confirm our position. Sights were taken on three stars - to give three lines of position - that would

intersect to show our exact location. Relating it to our course, and expected position, the wind could be determined - and aircraft heading adjusted. (Navigation is a fascinating game - and could keep one engrossed for hours.) Octant observations were taken by projecting the instrument through a fitting in the aircraft ceiling - to observe the sky above. As long as the sky was clear, navigation to stay on course was no problem. However, sometimes clouds obscured the sky - and the celestial fixes were impossible. Should the Captain, or Navigator become concerned about possible excessive drift different than predicted, the Captain would order a drift sight to be taken.

This was accomplished by the Navigator going to the passenger deck - forcing open a special window(at 150 mph) in the passenger lounge - and mounting a sighting pelorus on the sill. Then, a phosphorus bomb would be thrown overboard - to fall into the sea and make a floating light. By sighting on the light as we flew away - one could measure the drift angle of the aircraft. Should one guess wrong on the direction of the drift - and lose sight of it under the aircraft - the drill would have to be repeated on the opposite side. (As you can imagine, this procedure creates some wide eyed and curious passengers.) By determining our drift, we can keep on course, but this did not give us information of our forward progress. That will await a three star fix. Occasionally, we would sight a ship at sea, and make a radio contact, for information as to his position. That always created some excitement for the ship - as they do not expect to see a plane over the ocean - and talk by radio. They gave us an exact latitude and longitude - which was appreciated and duly acknowledged. We did not have to worry about his talking to another aircraft - as Pan American was the only plane flying over the ocean.

Voice communication by the pilots was available when they were in line of sight . At 8000 ft. voice contacts using VHF (Very High Frequency) was possible for about 100 miles. However, when the aircraft was beyond the 100 miles, communication was by CW code by the radio operator. He used H F (High Frequency) signals - that required a long antenna for the proper wave length. When this was required, the radio operator requested permission to unreel an antenna that would trail several hundred feet below the aircraft. - permitting CW code operation. This posed no problem of safety - as we were the only aircraft out there. Positive communications were important - to send hourly position reports, receive pertinent weather reports, contacts with ships at sea, and to report emergencies, if they should arise. Radio Operators have fantastic abilities - as I have observed them monitor and read code signals, read a book, and be unconcerned if someone speaks to them. It must take years of experience.

Two pilots and a flight engineer were required to be at their stations at all times. After an hour or so, with the flight proceeding routinely, the Captain would request my duty in the cockpit. He was free then to join the passengers to socialize, answer questions, and observe the service. In his absence, the First Officer assumed cockpit command - and was fully qualified to do so. My role was to observe - and to take the controls only in an emergency - or when directed to do so. I enjoyed these cockpit assignments as it was an opportunity to ask questions - and gain familiarity.

The Flight Engineer had a station behind the co-pilot, with complete instrumentation for engines, fuel consumption and generators supplying electrical power. It was important to monitor fuel consumption - and which tank it was coming from.

This was to keep the aircraft in balance for efficient flight - and to monitor the amount of fuel used. The aircraft was unpressurized - making it necessary to fly 10,000 ft. or below for passenger comfort. Cabin temperature was controlled by the engineer for a comfortable level.

Hourly "position reports" were prepared by the Navigator - and given to the Radio Operator to transmit to the Pan American base. The Flight Engineer supplied the figure for the fuel remaining to the position report - and would be entered on a "Howgozit Graph" to determine a "Point of No Return". This was the position that we could no longer consider turning back - as we would have insufficient fuel to do so. This graph portrayed the progress of the flight - and would help determine a decision in case of an emergency.

With the flight proceeding normally, Flight Service were concerned with passenger comfort and welfare. Ocean flying was still in the pioneering stage - so there were always some who were apprehensive. Every effort was made to create a pleasant and comfortable atmosphere. Food and drink were important to this concept - so snacks, fruit, and drinks were available upon request. The bar opened an hour after take-off. At dinner time, the lounge was converted to a dining room with seating for about 24. The atmosphere was first class - with tables having white linen coverings, and set with sterling silver tableware, DeHaviland china, crystal goblets and fresh flowers. There was a Captains table that he usually attended - with his specially invited guests.

Meals were gourmet, served in five courses. First, was fish or a seafood cocktail, followed with soup, then a choice of entrée (steak or fowl), and dessert. Coffee and liqueurs were served at their passenger seat - giving Flight Service time to set up for the Second Seating. At the Second Seating, some pilot was asked by the Captain to attend - generally the First Officer.

By the time the second meal service was completed, about 6 hours had elapsed - and it was about 11 PM San Francisco time. Upon request by the passenger, the Pullman bunks were prepared and made available for sleeping. Some passengers did not wish to sleep - and returned to the Lounge for talking, reading and possibly a night cap. Most passengers did utilize their bunks, leaving their shoes to be polished before arising. The passengers would have about 9 hours to sleep before being awoken for arrival.

Our flight continued in excellent weather, staying close to the predicted flight plan. When we started to get some turbulence from the tops of clouds, the Captain climbed to 10,000 ft and found smoother air. Crew changes took place, allowing the opportunity to sleep in a crew bunk. I was so fascinated by the work of the Navigator, I preferred to observe and talk. His chart showed the predicted course, and the "fix" positions he had determined, showing a slight deviation due to actual winds vs. theoretical. We were averaging 135 kts., and were 7 minutes ahead of flight plan - so we were having a "good flight". At the "Point of no return", crew attention was now directed to our destination of Honolulu. The weather report was favorable.

Most passengers sleep very well with the gentle motion of the aircraft and the

lull of the smooth running engine - and will get 7 - 9 hours rest. But, for some, they will remain restless. About three hours before arrival at Honolulu, those still sleeping will be awakened - as the time is needed to freshen up, get dressed, and have breakfast in the lounge. While they are absent, the Pullman bunks are replaced, and their seats made available for the landing.

Passengers are kept advised about arrival time - and for the final hour their excitement is obvious. When it is reported that the island of Oahu has been sighted, all eyes are peering out the windows to get their first glimpse of the island. Radio contact with Pan American base confirms our arrival time - and they advise the weather and landing conditions in Pearl harbor bay. A gradual descent is started, as the Captain wants to cross the coast at a low altitude for the passengers sightseeing. Crossing the east coast, Kaneohe Bay is close by on the right, and the tip of Koko Point to the left. We pass just north of Diamond Head - and fly the length of Waikiki Beach - with the Moana and the Royal Hawaiian hotels prominently in view on our right. We quickly pass the city of Honolulu - and started a circle of Pearl Harbor bay - with many US Navy ships in view. Radio contact is made with the Pan American launch - confirming the landing area has been cleared and ready for landing. The Captain makes his approach - with a landing to the east and touching down gently on Pearl Harbor. Flight time was 18 hours and 48 minutes. We taxi to the Pan American base on the north shore of Pearl Harbor - and I secured the mooring line with a boat hook and dropped it on the mooring post. We had arrived and was secure.

Our arrival at the Pan American base at Pearl City was theatrical. In addition to a palm tree tropical setting, a Hawaiian musician group were playing traditional music, while beautiful Hawaiian girls in grass skirts were greeting the passengers - and hanging flower leis around their necks. Friends of the passengers brought leis - so soon they had multiple layers of flowers adorning them. Pan American served pineapple juice and rum punches and pineapple spears, while they waited for the baggage to be brought. It was a very festive arrival ceremony. The passengers excitedly told of their flight experience over the ocean - and I inwardly shared their enthusiasm - since it was my first experience too. And, like the passengers, I enjoyed the arrival with leis and rum punches.

The crew bus drove us through Pearl City, with many bars and stores catering to the Navy, and then through Honolulu and beyond to the famous Waikiki. Our hotel was the Moana, a large white painted wood hotel located right on Waikiki beach. It had a large courtyard with a tremendous banyan tree shading the whole area. It was a wonderful place to relax and enjoy the beach scene beyond. Surfers were in view, riding the waves - as well as the traditional outrigger canoes, right up to the beach. It was an inviting scene - but my lack of sleep directed me to bed for a few hours rest.

Later, I had a chance to spend cocktail hour in the Banyan Court. I was amazed at the spread of the tree - and at the limbs that sent runners to the ground to root and provide support for the extended limbs. A walk from the hotel, disclosed a quiet, mostly residential area that had many beautiful coconut trees and flowering tropical plants. The Royal Hawaiian Hotel was just next door to the Moana - and these seemed to accommodate most of the visiting tourists in the Waikiki area. From the beach at

Waikiki, the landmark peak of Diamond Head stood out to the left, creating a beautiful backdrop for the coast and ocean. From my initial experience, it seemed like the Paradise that I had heard about. It was breathtakingly beautiful, the people happy and friendly to tourists, the food of fish, and tropical fruits exceedingly good. I looked forward to more experiences in Hawaii. However, I never learned to like their traditional food called Poi. But, I never learned to like wall paper paste either, and they tasted the same.

Our return to "the Mainland" as described by the Hawaiians, was just as enjoyable as the flight to Hawaii. The take-off from Pearl Harbor - among the mighty naval warships was impressive. After take-off, the Captain elected to stay low to give the passengers a scenic view of Honolulu, Waikiki, Diamond Head, and finally Koko Head for a last view of Oahu. Our flight enjoyed excellent weather, and a following wind, so our flight time was 17 hours and 45 minutes. Again, I was fascinated by the mystery of Navigation, with three star fixes and use of the octant. I look forward to assignment to Navigation classes at a later date.

My first flight to Honolulu had gone so smoothly, I expected the next would be the same. That was not to be. After take-off, we saw the Golden Gate bridge to mark our departure from the coast. Shortly after, we started climbing through clouds that gave us an unsettled ride, until we broke out on top at 8000 ft. There were more clouds above - so we were flying between layers of cloud. We could follow radio bearings on San Francisco until they became erratic and unusable at about 100 miles. Our flight continued smooth, but fixes were impossible due to overhead clouds. Even determining drift was impossible due lower clouds. We continued flight, but we were without a positive fix of any kind. Unfortunately, there were no ships at sea that we could contact for a positive position. The Captain was becoming uneasy about no fixes - since the cloud structure was not forecast either. That meant that unusual winds may be giving strong headwinds - or blowing us off course.

This condition continued, with the Navigator alert to get a fix with any break in the clouds. It did not happen - and after 8 hours of flight and no confirmation of our position - the Captain elected to turn back to San Francisco while he had plenty of fuel. It was a conservative decision - and the correct one - but was probably difficult for the Captain to make. Pan American always stressed safety in their flight philosophy - and there would be no criticism for his decision. No fixes were possible on the return flight either - so there was some concern about how much we may have drifted off course. When we finally approached the California coast and we could get accurate radio bearings, we found we had drifted only a short distance off course. We followed the radio bearings to the coast where the clouds were broken up - and we could descend visually over the bay area. We landed safely in San Francisco harbor - and after 16 hours of flying - were back where we started. Everyone felt disappointment, but smug that we had returned safely. The Captain made a difficult judgement call - as that was his responsibility - and his alone.

The flight was rescheduled for a day later - and this time the weather was almost ideal. The flight was uneventful - and the Captain heartened by passenger reaction praising him for good judgement. I was never aware of another flight that encountered similar cloud conditions that forced a return due lack of position fixes.

I was excited to learn that my next scheduled flight was to Auckland, New Zealand. This would be a new part of the world for me to go to the South Pacific. Auckland was 36 degrees S. Lat. And 175 degrees E. Longitude - and I would be crossing en-route into another date zone.

Our San Francisco - Honolulu segment of the flight was routine - with excellent weather for a smooth flight. Upon arrival Honolulu, I found that our passengers continuing onward would be staying at the Moana Hotel with the crew. The Flight Service group would co-ordinate their stay with local tourist trips and supervise plans for pick up for flight departure.

The crew pick up time for the flight south was 4 AM. Take-off was scheduled for 6 AM - for a 1560 nautical mile flight south southwest of Hawaii to Canton Island. As usual, the weather was ideal for flying - so the Captain stayed low at 6000 feet to enjoy the view. Our route was in a remote part of the world - and after 1000 miles we passed abeam Palmyra Island, confirmed by a radio bearing, as it was not in sight. Winds in this tropical zone are light - so drift is negligible. Octant sights are taken on the sun to confirm our en-route progress. A radio beacon will guide the Navigator in the final phase of the flight. Nearing Canton, the Captain starts a slow rate of descent - and soon a round circle of an atoll comes into view. That is Canton Island. Drawing closer, we could see the narrow band of the atoll, with a big bay in the center. The water was an incredible blue - contrasting to the white of the land atoll. The bay was completely enclosed - giving an ideal landing surface for our aircraft. Radio contact was made with the base and the launch waiting for us in the bay. We landed - and then taxied to our mooring - where a line was attached to draw us to a floating ramp. When the passengers disembarked, they could walk a short distance to the Pan American Rest House - where we would spend the night. Accommodations were excellent - and comfortable. Flight Service looked after the passengers to see their needs were met. The bar opened on our arrival - and the passengers were served complimentary drinks. Later, an excellent meal was served. (The word remote - reminds me of Canton Island - located 3 degrees South latitude & 173 degrees West longitude. Vegetation - one Palm tree.)

The usual dawn take-off was scheduled. Canton Island to Auckland, New Zealand via overhead Suva, Fiji was 2160 N.M. - and would take us about 15 hours. We slept until called - and then went directly to the aircraft - as breakfast would be served after take-off. At first light - we charged across the bay - and lifted into the air. The weather was excellent - and again the Captain chose 6000 ft. as his cruise altitude. This was desirable, as we would fly by identifiable atolls and islands that would aid our navigation. There was a radio beacon at Suva, Fiji to give us a positive fix - even if obscured by cloud. It was a pleasant flight until after Suva, then the clouds increased rapidly and were dark with rain. As we approached the stormy area, the Captain chose to descend and stay under the cloud rather than penetrate them. We were forced lower and lower until we were about 1000 feet above the sea that was growing in violence. When we entered a tropical downpour area, the rain sounded like rocks hitting the aircraft. The Captain eased down to 700 feet - and the waves looked very close - and rough. The rain came even harder - so it was like we were in a waterfall. Then, it happened - and all four engines ran rough - and momentarily cut out - probably drowned in the rain. The seas were violent - and I considered we may land among them. Fortunately, the engines

started erratically coming back to life- and finally regained full power. And, I began breathing normally again. No one on the flight deck spoke - but the silence was pregnant -as the possible consequence was too awful to contemplate. I learned later, that this Captain always preferred to fly under weather rather than through it.

En-route we passed the International Date Line - and suddenly it was tomorrow.

We were racing the sunset to Auckland - and landed shortly after it dropped below the horizon. It had been an eventful day - and everyone seemed ready to enjoy an early night rest. Fortunately, we would have the day off tomorrow.

Auckland reminded me of scenes of an English city. I was eager to see more of it - so I arose early to do some sightseeing. I was standing nude at the basin, shaving, when suddenly the door burst open - and the maid entered with a tray. Being a modest type, I crouched behind the bed and shouted, "What in the hell are doing here"? She answered, "I'm serving tea - it's an old English custom". Then, she asked, "What are you doing there"? I responded, "I'm hiding - it's an old American custom". She put down the tray and left - but I'll bet she enjoyed telling her story with others. Later, I thought it was funny too.

The Pan American crew was invited to "Tea at Four" at the hotel, by a Ladies group from a local church. It was very pleasant, and we were popular with the ladies, young and old. But, where were the other men? Then, I realized that New Zealand was at war with Germany - and their men had gone overseas to fight. Those remaining were too busy to attend a tea. It made me thoughtful about war and its consequences.

Our return flight home was enjoyable but uneventful. I do remember the Captain giving me some flight experience on my cockpit duty watch, which pleased me. Maybe I was a little too aggressive on the controls while maneuvering the plane, because he gently said, "Son, we've got some nervous old ladies aboard, and they don't like exciting flying. So, make your turns smoothly, so they are not aware of it." It made me thoughtful - and from that time - I subscribed to the philosophy of remembering the passengers and giving them the smoothest ride possible.

After my return from New Zealand, I had 14 days off to explore the California area. Wilma and I chose to go to Yosemite National Park - taking our infant son Robbie. It is a spectacular valley - and we enjoyed going to see the cliffs, waterfalls, and scenic outlooks in the mountains. It is one of those "Don't miss" places, if the opportunity arises. We were there late November and it turned very cold at night. We had a cabin with a wood stove for heat. During the night, we heard a pitiful cry from Robbie that awakened us. The fire was out, the cabin cold, and Robbie was wet and very cold from having kicked off his blanket. Poor little guy - but he survived by getting changed and brought into our bed between us. Yosemite was a special place for us - and we returned several times. When we returned home, I found my next schedule was to Hong Kong - departing San Francisco Dec. 8, 1941. Unfortunately, that flight was not to be - as a National tragedy happened December 7th, 1941.

Sunday - December 7, 1941 - JAPANESE BOMB PEARL HARBOR .

Like most Americans, I was incredulous at such newspaper headlines and radio reports - and the realization that our country was at war. Since I had been at Pearl Harbor so recently, I had a vivid picture of the devastation. What the affect would be on Pan American Airways was a matter of conjecture. The other thought was that I surely would be recalled to active duty with the Air Corps - for which I had so recently been trained. I was so convinced, that I spent time uncovering my uniforms that had been packed away. Telephone calls to my Air Corps friends who were pilots with Pan American, confirmed that they were thinking the same. Pan American had hired mostly military trained pilots from the Navy and Air Corps - so if they left - Pan American would be badly affected. It was a sobering day - and everyone knew it would change the lives for many Americans.

Pan American called to cancel the next days flight - but I was told to stand by for a reschedule at a later time. On Tuesday, December 9th, I was called to report for a flight the following day to Honolulu. In the meantime, I kept close by the radio to hear the latest news of the chaos at Pearl Harbor - and rumors of a possible invasion at Hawaii and even the California coast. Rumors of all kinds filled the news - as the realities of war were being experienced.

It was a tense Pan American crew that departed Wednesday - for the first Pan American flight from San Francisco into war torn Pearl Harbor [A Pan American Clipper was on Wake Island when it was bombed and sustained some damage. But, it could fly and returned to Pearl Harbor.] Our passenger load was nearly all military personnel - and the rest - civilians with high priority. Our flight did not use night wing lighting - and the windows were blacked out - to avoid possible detection. The Captain had been given recognition codes to flash - if challenged in flight.

Our flight to Honolulu was routine, except for the anticipation of what we would find upon our arrival at Pearl Harbor. About an hour before arrival, we were intercepted by U S military aircraft that flashed a challenge signal code. We were ready with a code reply that they acknowledged - and then they flew formation with us inbound. The island of Oahu looked peaceful from the air - but when we arrived Pearl Harbor - it was a shambles of devastation. Ships were half submerged, and others completely capsized - so it seemed incredible to accept the reality. Adding to it, the reported loss of lives, made it an overwhelming sadness. Such is war - and it made one wonder about the future.

After landing, we learned that we would have minimum rest, as the plane was vitally needed to return to the U.S. We slept in Navy quarters close to Pearl Harbor. When we returned that afternoon after 8 hours rest, we found the terminal overflowing with families, and obviously distressed at the impending separation. Our passenger load was 83 women and children plus one male civilian. (VIP ?) Obviously, we are evacuating unnecessary personnel from Hawaii - as invasion was still considered a possibility. The farewells were poignant , as the future was uncertain.

My memory of the return flight was one of sympathy for the passengers.

Possibly due to worry and concern for the future, the women and children were restless and insecure. Things seemed to be better after their dinner was served and they tried to settle down for the night. Unfortunately, we ran into a little turbulence - and that started the resulting mess. One child upchucked - and soon he was joined by others in rapid sequence. I heard the total was about 90%. I could believe it when I had to make a visit to the back of the aircraft - and skated in vomit going and coming. The stench was powerful. The stewards made outstanding efforts to make passengers comfortable, but it was 14 hours of cabin misery. That was the worst flight for passenger distress that I can ever remember, - and probably for them also.

[Notice from Pan American - A Pan American flight was stranded in the western Pacific area - and unable to cross hostile routes to return eastward to Hawaii. As a result, the flight was ordered to pioneer a new route westward - and successfully completed a "round the world " flight to return safely to the USA. It proved to be a very interesting adventure.

The expected call to report to the Army Air Corps for service was finally resolved. Pan American had been in contact with the War Department in Washington - convincing them that the service trained pilots in the company (95%) could best be utilized for the country by remaining with Pan American. Then, a viable organization can be contracted to the military services for a required duty. I received a letter from the State department requesting that I remain with Pan American. It further stated that my military file had been removed from the Army Air Corps records - and were now on file with the State Department. That decision seemed logical - and I was willing to comply.

After four months as a 3rd Officer - I was assigned to Navigation class. With my past interest in Navigation - the class work went well - and I passed as a qualified Navigator and ready for assignment. My flights assigned as a Navigator were enjoyable - as it was like playing a game. Flight variables would create positions offset from the desired track - and it was my responsibility to discover the error and return to course with minimum penalty in time and fuel. Three star fixes using the octant kept the flight on course. It was the goal of a Navigator to get three lines of position on the three stars - that would result in a pin- point intersection. That was a perfect fix. If it resulted in a small triangle - it was quite acceptable to assume your position to be in the center of the triangle - with a slight error. A Navigator who kept accurate location of his flight - and could give the Captain accurate arrival information - was highly regarded by the Captain. I was a good Navigator - but then - I liked the job and worked at it.

Some Captains are jokers. One time when I was working on my Navigation chart, the Captain stuck a wad of gum right on my course line. Without a comment - I made out a course change of a 90 degree right turn for the pilots. After one minute, I sent another course change back to the original heading. After another minute, I sent another course change 90 degrees to the left - and then after a minute a another change back to the original heading. The Captains reaction was, "What in the hell are you doing"? I pointed to the gum, and said, "I didn't want to hit that mountain". He grinned - and walked away.

On another of my Navigation flights from San Francisco to Honolulu - we had a dog-leg course north of a direct flight - to take advantage of more favorable winds. It would result in a farther distance but take less flight time. It was critical to make the course change at the proper dog-leg point. We had been flying in cloud - so celestial fixes were not possible so far. Finally, we got a break in the clouds - and the Captain and I both rushed to get 3 star celestial fixes. When we both plotted our fixes, unfortunately, they did not compare well. The Captains fix was 40 miles north of my fix. He tried to convince me that I was in error. Remembering my Navigation Instructors words, "Always believe in your own work" - I stuck to my conviction that I was correct. Acting angry, the Captain demanded an ETA (Estimated time of arrival) over the Oahu coast. I gave him one based on my fix. If I was wrong, we would descend 20 minutes too early - and our arrival would be late. We proceeded on my estimate - and started descent while in cloud. The Captain must have been watching the clock, too - and the time was drawing close to my ETA. On the minute, he inquired, "Where is the coast"? Just then, we broke out of the cloud - and the Oahu coast was in view - just over the bow. My ETA was almost exact - but I diplomatically answered, "One minute ahead, Sir". Later, the Captain said, "Nice job of navigation". I wondered if he had been testing me. Maybe.

After 4 months of Navigation duty, I was informed that I was eligible for the First Officer position - after flight qualification. Promotions were being accelerated due to the needs of the war effort. Pilots were needed for flying, while non-pilots could be trained quickly for navigation. I was scheduled for my flight qualification check out on the Boeing - 314, and it proved not very demanding. I did the usual stalls, steep turns, and finally 3 take-offs and landings - and declared qualified. It thrilled me to fly this aircraft that I was in so much awe only 8 months earlier. I still had much to learn - especially in water handling. On a strong cross wind taxi, it was possible to "dip a wing" and cause prop and wing damage. To offset this possibility, I have seen Captains order extra crew to crawl out a wing passage, to provide weight to help keep the wings level - and prevent "dipping".

As a First Officer, I had the opportunity to direct my attention to flying, rather than sub-ordinate jobs. Working directly with the Captains, highly experienced, gave me the opportunity to learn more - and quickly. I was permitted by the Captain to hand fly the aircraft, to gain more flight experience. (Normally, the autopilot controls the airplane during straight and level flight - but most Captains prefer to hand fly during maneuvers and for climbs and descents to landings.) I enjoyed my position as First Officer, for the prestige and authority of being second in command - but also for the opportunity to gain in experience. It would have been desirable to serve as First Officer for a year, but it was not to be. After 4 months as First Officer, I learned that I was being transferred back to Miami - for an opportunity to check out as a Coastwise Captain. When the Captain on my last flight learned I was going to Miami for Captain check out, he graciously gave me the take-off in Honolulu - and the landing in San Francisco. That was a total of 4 take-offs and landings in the past year - which is not much experience for one going for a Captain check out. However, I was too excited to give it much thought.

CONSOLIDATED COMMODORE

(Shown on the next page)

Statistics: (Built by Consolidated Aircraft Company)

Length - 68 FT. - Span - 100 FT. - Height - 16 FT.

Take-Off Gross Weight - 17,600 lbs.

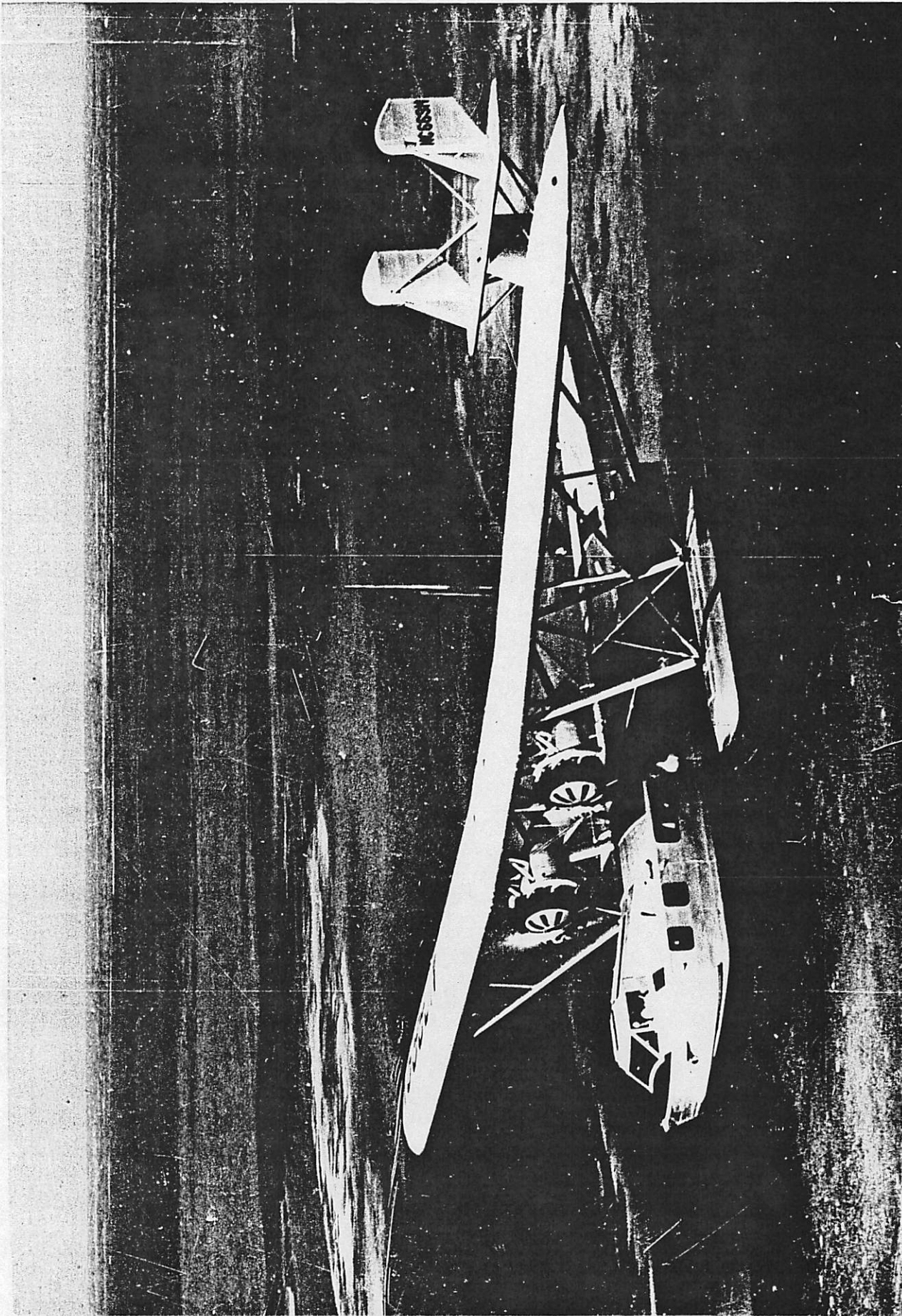
Power - 2 Pratt & Whitney Hornets (575 H.P.)

Speed - 108 MPH

Range - 1000 Statute Miles

Seats - 22

The Commodore was originally built for naval patrol work. However, NYRBA Airline realized its potential for carrying passengers and mail on its east coast route to Buenos Aires. NYRBA ordered six Commodores, but by the time the aircraft went into service the order had been increased to fourteen. Pan American absorbed NYRBA on September 15, 1930 and became an important asset for routes and equipment. Pan American used the Commodore mostly in the Caribbean area. The aircraft became outclassed by the Sikorsky flying boats that Pan American acquired in the 1930's, but still were used on certain Caribbean routes for about seven years. Some of the Commodores were sold to China for use by C.N.A.C. - and three transferred to Bahama Airways. The Commodore aircraft saw service during the World War Two - training military navigators in Miami, Florida by a Pan American contract.



CONSOLIDATED "COMMODORE" - Capt.- Miami, FL "Training Navigators" (1942)

SIKORSKY S - 43

"BABY CLIPPER"

(Shown on the next page)

Statistics: (Built by Sikorsky Corporation)

Length - 51 FT. - Span - 86 FT. - Height - 17 FT.

Take-off Gross Weight - 20,000 lbs.

Power - 2 Pratt & Whitney Hornets (750 H.P.)

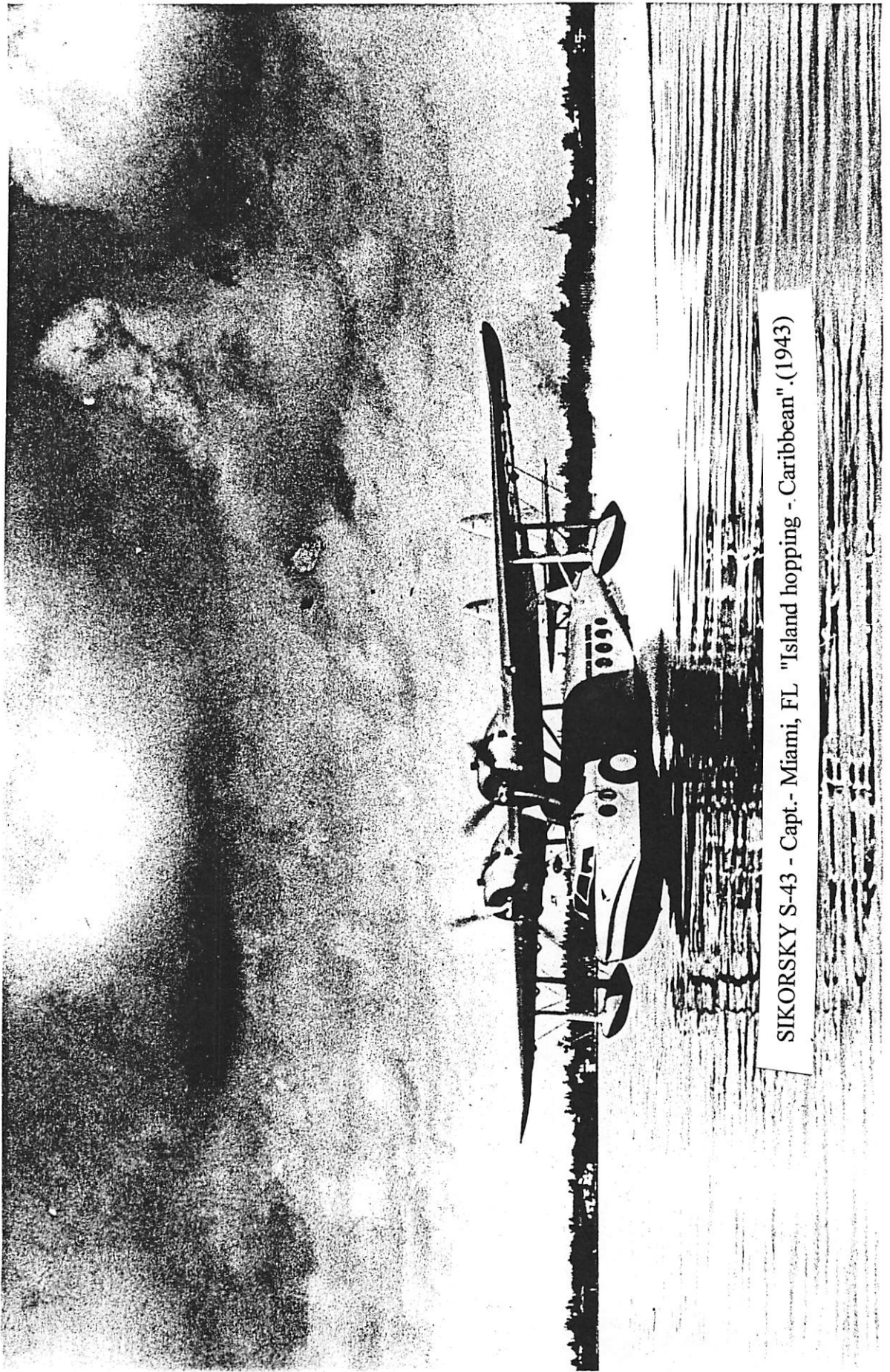
Speed - 165 MPH

Range - 750 Statute Miles

Seats - 18

FEEDER AIRLINE BOAT

In South America and in the Caribbean Islands, in the 1930's, the large S - 42 flying boats needed a smaller aircraft to back them up, to handle the traffic to smaller cities where average loads did not justify the large Clipper operations. So, Pan American turned again to the Sikorsky Corporation for the answer. They proposed the S - 43, a scaled down S - 42 with two engines instead of four - inevitably earning the title "Baby Clipper". Thirteen of the S - 43 were ordered - and were produced in a very short time. The first were delivered January 1936 - and were proven immediately successful for its designed purpose. Seven were allocated to Panair do Brazil - two to Pan-Agra - and the remainder flying for Pan American in the Caribbean.



SIKORSKY S-43 - Capt.- Miami, FL "Island hopping - Caribbean". (1943)

September 1942 - CAPTAIN - CARIBBEAN AREA.

The Pacific Division released me - to report to the Miami Caribbean Division. After arranging for gas stamps for the trip, we departed California, taking a northerly route to take us to Michigan, before continuing to Florida. It would allow time for short visits to our families, and we could show how much Robbie had grown in a year. We had lots to talk about - and all too quickly - we had to say good-by and head south. Arriving and reporting to Pan American, I was given time to arrange a domicile. With the prospects of Captain pay (\$600 / mo.) we decided to buy rather than rent a house. Finally, we settled on two possible houses. One was a 2 bedroom, single bath modest house for \$5500. The second, and much preferred, was a 3 bedroom, 2 bath, well built house on a large corner lot with citrus trees, and a separate garage. However, it cost \$7000 - and the extra debt seemed risky. We debated long, and then bought the \$7000 house with \$600 down payment. We were the proud owners of a wonderful house in South Miami, in a pleasant new neighborhood.

Reporting to Pan American, I was informed that I would check out on a Commodore aircraft. It was a 2 engine flying boat, built by Consolidated Co., had seats for 22 and flew at 108 mph. Wing span was 100 ft. and it was 68 ft. long. It was no longer used for passengers, but would be ideal for training Navigators. Pan American was operating a Navigation School for the military services - and Commodore flights would provide practical training.

My Commodore check-out came in a few days - and proved to be an easy airplane to fly - as well as operate on the water. The Chief Pilot gave me the usual flight routine - plus take-offs and landings, including crosswind ones. Satisfied, we waited for the sun to set - and did three more night take-offs and landings. Then, apparently satisfied, he said, "Lets go home" - and when arriving there, told me that he would inform scheduling to put me on the Commodore schedule. That was it - I had passed to Captain rank. He then told me, "Report to Pan American to make arrangements to have 4 stripes put on your uniform". That was a very proud moment for me - and a big advancement in my career with Pan American. I was now in command again - a Pan American Captain - at 26 years of age. (October 1942)

I was eager for my first Commodore command flight - for three reasons. One - my Captain pay started with my first command flight. Second - it would add new interest to be in command and making the decisions. Third - I felt I could make a contribution to the Navigation School - working with the Instructors. Each class had about 12 students - plus the Instructor

We were scheduled to fly 8 PM - 11 PM - picking a sector where the weather permitted celestial sights to be taken. The night was clear - so we selected the sector off the Florida coast and away from city lights - to make our flight. For three hours, we cruised up and back - and might have been considered dull. Not so - I was enjoying every minute; and the training session went well. We returned to the Dinner Key base - made contact with the launch to confirm the area was clear - and made a smooth landing. Soon, we were at the dock - and my Captain in Command flight was over.

Pan American used three Commodore aircraft that flew most every evening that had adequate visibility. My own assignments were generally three times a week. The Navigation training program was very successful - producing many Navigators required on military flights over the oceans - and for long distance bombing raids.

I had been flying the Commodore navigation flights for about three months - when I received notice that I was to check out on the S-43. (That brought back memories of the engine change at San Pedro de Macoris in Dominican Republic.) This was very good news, as I liked the airplane, and the routes it flew were challenging and interesting. Since I was already qualified on the airplane from co-pilot days - all I needed was the required 3 take-offs and landings - both day and night - to be qualified and current.

My first flight assignment on the S-43 was the four day flight - Miami to Port of Spain, Trinidad. It was with great anticipation that I departed Miami for Port au Prince, Haiti - my first stop en-route to San Juan, Puerto Rico. The route was well known to me from past co-pilot years, but I was well aware that now I occupied the left seat and in command. The weather was beautiful -and we could spot the southern coast of Andros Island as we passed abeam - and then later the eastern end of Cuba. Port au Prince was ahead with its big bay and fortunately was calm and low swells - so the landing was smooth. During the transit - a short delay was experienced - so the Station Manager suggested we take our passenger to a hotel for our lunch. We were all loaded on a bus together - so we were aware of a very enthusiastic and talkative lady tourist - who commented on everything new and different. As we drove out the gateway - she was talking a mile a minute about the buildings, the colorful dresses on the ladies, and the tropical flowers. Then, she spotted a group of children and cried out, "Oh, look at the children". We all looked - and as we drew near - realized the older boys were naked as jaybirds and quite well hung. We were all amused at the commonplace sight, but our talkative lady became very quiet and remained so all the way to the hotel.

The plane was ready when we returned from lunch - so we boarded immediately. As we taxied out, I remembered the swells that can be treacherous, so I started take-off to insure I had take-off speed before reaching them. All went well, and we were airborne and soon flying eastward to San Juan. We landed late in the day in the well protected and colorful San Juan harbor. We would overnight - and tomorrow continue southward to the island ports of the Virgin Islands, and the Lesser Antilles - en-route to Port of Spain.

Our first port of call after departing San Juan was St. Thomas, (US Virgin Islands). It had a very small bay for aircraft - and was surrounded by hills to the south. Landing was not a problem - as we could approach flying low over land to the north - then turn south with the bay just ahead. It called for precise flying - but it was challenging and fun. We landed without incident.

Few passengers were exchanged at these small ports - so we could make rapid transits. Sometimes the passengers were brought to the aircraft by boat - if refueling was not necessary. We did not refuel in St. Thomas, as our next stop was St. John, just a short distance away. And, a light aircraft was desirable for a critical take-off. The wind was from the south - requiring take-off in that direction - toward the hills and the swells

rolling in through the harbor mouth. The technique - was to taxi to the north shore as close as possible. Then as you swung into the wind, apply full power and attempt to get on the step as soon as possible. A special marked buoy ahead showed the limit of your take-off run. If not airborne at the buoy, close the throttles and stay on the water. If you did not - you would be too far committed into the bay and the hills, to make the necessary right turn to go out the ship entrance to reach the open sea. So, all eyes in the cockpit keep watch on that marker buoy. Even if airborne, it was necessary to make a low level turn to the harbor entrance - passing well below hill tops when flying through.

That was theory - now we would put it to practice. We were a little tense knowing that it must be executed just right. We taxied into position - almost touching the north shore - turned to the south and put on full power. Acceleration was fast - we're on the step with airspeed increasing to take-off speed. When the co-pilot calls the speed, I pull back on the yoke- and we're airborne well before the buoy marker. But, the hills look close - so I start my turn and see the harbor channel ahead - and fly through at 300 ft. with the hills above us on both sides. We can relax - the open sea is ahead. We level off at 1000 ft. - as it is only a short flight to St. Johns. (US Virgin Islands) Ahead of us is the big bay that is well protected to provide a smooth landing area. We can land straight in - and when on the water - taxi to a mooring deep into the bay. We make fast to the mooring - and let the launch bring our passengers to us. Again, only a few passengers disembark - and a few join us. The service is vital to the island however, as visiting ships are very infrequent and slow.

St. Johns is a tropical paradise island - with snow white beaches lined with palm trees. It was as idyllic as one could imagine. When I expressed my admiration of St. Johns to the Pan American Station Manager - his reply was, "You can buy a mile of beach front for \$10,000". That was an opportunity lost. Little did I realize that the post war era would develop a tourist trade that would make it extremely valuable property.

Departing St. Johns, we flew just off shore of the Leeward Islands group of St. Kitts, Nevis, Monserrat and Guadeloupe. The scenery was spectacular, with the islands having tree covered mountain peaks that sloped steeply to the sea - ending at white lacey surf with deep blue water beyond. I marveled, as I imagine the early sailing ship explorers did years before. Next the Windward Islands came into view - and our next port of call was Martinique (FR). It was a fairly large island - and our landing area was on the west side of the island in a large open bay. It was affected by strong winds that allowed a rough sea surface. It was not critical, but our landing was somewhat rougher than normal. When we arrived at our dock, we found that the war was very much on their minds. The island was blockaded by German submarines - so ships were few to come - and consequently supplies very limited. Our Pan American mechanic, told of his shortages, especially in children food and medical supplies. He was very grateful when I offered our excess galley food. I made a list of his needs and told him I would try to bring it tomorrow on our northbound trip.

Leaving Martinique, I started take-off close to the dock, so I could get airborne before the rougher water further out - and all went well. We continued south, down the western side of St. Lucia (UK), St. Vincent (UK), and Grenada (UK). Again, I was struck by the beauty of these Caribbean Island - making our flight most enjoyable.

Port of Spain, Trinidad was our next and final landing for the day. Remembering my visits before, I looked forward to another visit there. I liked the beauty of the island, but the people made it enjoyable with their friendliness, and their happy demeanor. In addition, music of the steel drums was entertaining, and the good tropical food very enjoyable. British past occupation seemed to always result in efficiency and an orderly society. Speaking English helped too.

Arriving overhead Port of Spain, the big bay adjacent to the city offered no problem in landing. Soon we were down - and at the dock - discharging our passengers. Favorable comments from the passengers about the "great flight" was welcome - and I had to agree - it had been a fun day. However, the crew was tired - ready for dinner and an early bed. Tomorrow, we will retrace our flight northbound.

We made the usual early morning departure from Trinidad, that is standard for flying boat schedules. Our first stop was Martinique. Knowing of their blockade, I kept watching for submarines, but never spotted one. (Probably, they surfaced only at night - to charge their batteries.) I was pleased that I could find the supplies for the mechanic at Martinique - and had them aboard to give him. When we arrived, he was most grateful for the supplies (especially the cereal for the children).

When I returned to the aircraft, after doing my paperwork ashore, I found a Martinique doll and a bottle of rum, as a token of his appreciation. [Every stop at Martinique thereafter, the same routine was enacted, I brought supplies and he expressed his appreciation with rum and a doll. And, he attempted to teach me French, but the effort was not too successful. Somehow, I did not hold my mouth just right.] We continued our northbound flight - and enjoyed the same appreciation for the Caribbean beauty as before. After Martinique, we made our stops at St. Johns, St. Thomas (of bay take-off fame) and into San Juan for our overnight stay. The next day - we flew to Miami with an en-route stop in Port au Prince. Our entire trip was one of perfect weather, over incredibly beautiful sea and islands, and meeting interesting people. And, for this, they pay me.

I continued to fly the S - 43 for about 5 months - and would have happily continued indefinitely. But, I was needed for a war effort project. The Chief Pilot advised me that they needed pilots to fly the S - 42 (Sikorsky 4 engine flying boat) in a government plan to fly vitally needed raw rubber out of Manaus, Brazil. It was located on the upper reaches of the Amazon River - surrounded by extensive jungle. The route to fly to get there was new and unproven - and no accurate charts for it existed. We would use National Geographic charts on our initial survey flight. We had a group of six Captains who were S - 42 qualified to make a survey flight for route familiarity - then start regular operational flights.

Our Survey Flight group departed Miami - en-route to Barranquilla, Columbia, which is a normal Pan American station. We overnighted - and made the usual dawn departure. Now, our flight would be over new territory. From Barranquilla, we set a course for Lake Maracaibo, to avoid flying over some high mountains, after which we turned south to fly over a remote area of Venezuela - to eventually arrive at Puerto Carreno, on the Orinoco River. This would be a refueling stop - from a barge located

on the river for our operation. The river ran at a current of 10-12 kts -which by itself is no problem, but if a wind is blowing - can make it tricky to make a mooring. That was the case this day - but on the second try, we succeeded.

After refueling, we were off for our flight to Manaus, Brazil, climbing to 10,000 ft. to insure we would clear the western end of the Guiana Highlands that rose to 7,000 ft. An hour out of Puerto Carreno and on top of broken clouds, we could see down to the land far below - when suddenly - we saw land only a couple thousand feet below. It was unexpected - and startling. We flew to assess the size of the plateau - and judged it to be about 15 miles across and 25 miles in length - with sheer cliffs rising to about 7,000 ft. It was unmarked on our charts, but it was noted for future consideration. That was quite a hazard for aircraft - if unknown. After leaving the Guiana Highlands - the land was much lower and completely forested as far as we could see. There was no sign of habitation at all. Secondary rivers were visible - obviously draining a rain forest area. Our flight to Manaus was 660 N.M. that was expected to take us 4 hrs. and 40 minutes. If on course at about 500 miles, we could expect to encounter the confluence of the Rio Branco and the Rio Negro rivers. If the confluence was visible, we could fly down the Rio Negro River southeast to the joining with the Amazon River. The city of Manaus was located at this juncture (Lat. 3 degrees S - Long. 60 W). We enjoyed good weather with excellent visibility - and found the confluence of the Rio Branco & Rio Negro. Now, we had a sightseeing flight the last hour to Manaus. The Skipper made a circuit of the city - so we could all appreciate the large city in such a remote area. (It owed its growth to the area rubber trees that grew wild in the forest - and prospered with the growing use of rubber in years past. During this economic boom in rubber, Manaus prospered and built an extensive city - including an Opera House of great renown. The Manaus area was the only large source of rubber in the world, until plantings were secretly taken to Malaysia and other Asian lands, to be grown on plantations. This new competition diminished the economy of Manaus & its wild rubber trees.)

After landing on the Amazon River, we followed the launch to the mooring - and then towed to the dock. We were met by the Pan American Station Manager and a number of city officials - as this US rubber program was considered a major enterprise that could have a great economic impact on the city. We were given the royal treatment. En-route to our hotel, we were given a short tour of the city that included a stop at the impressive Opera House. We were told that many of the famous opera performers of the time, made the 1000 mile trip up the Amazon River to this Opera House. Incredible. We found our hotel to be rather old fashioned, but very comfortable. We were invited to a welcoming banquet that night - with some complimentary remarks about the efforts of the new rubber program.

We had an early call in the morning - as we needed to make the usual early take-off for our flight north. When we arrived at the aircraft, it had already been loaded with our first cargo of raw rubber. It had a pungent smell that would permeate the aircraft, but we got used to it. Because of our heavy load of rubber, our fuel load was limited. Consequently, we planned a stop at Tomar, located on the Rio Negro River. It would also serve to station qualify the group aboard - if and when it was used as an emergency

stop in the future.

The landing at Tomar, on the Rio Negro river, presented some unusual circumstances. The river is well named - Rio Negro - as the water is so black (due to vegetable matter from the forest run-off) that it was like looking into a mirror. The clouds were reflected into it - so when viewed from above - it was like looking at the sky instead of the water surface. It made depth perception to land on the river a risky problem. The Skipper, however, showed us a trick to offset the mirror effect. He flew very close to the side of the river, so his side vision could see the trees and judge his height above the water until touchdown. That was a very valuable lesson.

The Tomar station was located at a isolated place on the river in this forest primeval - with towering trees 200 ft. high. It was rain forest country - remote and wild. The Station Manager told us a snake story. The local natives had been seeing "the snake" lately - and from the descriptions was about 100 ft. long. It was so long - it coiled to make its own eddy in the river - to trap fish that it could then reach in to grab. Snake story? Maybe. But, the dark forest, dark river and remote quiet could make you a believer. (Anaconda snakes live by rivers - and 25-30 ft. are not uncommon.

Brazil nut trees grow nearby, and the Station Manager said he would put a box of nuts aboard for us. He warned that they were very rich, and the oil in the nut would burn, if lighted by a match. The box was 50 lbs. of nuts - and he was right - they did burn when lighted.

Our refueling was done by hand pumping from barrels of fuel. So, we were a little late departing Tomar. Finally, it was completed, and we were ready to go. Everyone agreed, we were happy not to be overnighiting in Tomar, on the Rio Negro. Take-off was normal - except for frightening a large flock of white birds - specie unknown. Our flight to Puerto Carreno went well - except for three attempts at making the buoy - in the fast current and a strong cross wind.

Our flight to Barranquilla was uneventful - and the same to Miami the next day. It was good to be home - with lots of new adventure to talk about. I learned that I was scheduled to command the same flight in three days.

Our Survey Flight had gone so smoothly - I expected my command flight would be a repeat. It was not to be. The flight, Miami to Baranquilla, went well in excellent weather. Arriving Barranquilla, the wind was easterly, so we planned a landing across the river. The approach was fine - and just about when we were flaring for a touchdown - the flight engineer screamed, "LOG" - and pointed to a floating log just under the surface ahead. (If we had landed, it surely would have ripped out the bottom of the light aluminum hull.) Reacting to the alarm - full power was applied - and we passed above the log. But, the airspeed was slow to reach climb speed - and we were rapidly approaching tall trees on the far side of the river. Flying at stall speed, we crossed over the trees, but I wouldn't be surprised if the hull touched the tops of the trees. That was close - but there were no alternatives. Our cockpit crew had a good conversation piece - en-route to the hotel.

The next day, our flight to Puerto Carreno went well - with good weather to observe the high peaks to avoid. Radio bearings gave good progress reports on our

ground speed - and we were essentially on flight plan. Puerto Carreno came into view - and the landing was made on the river. It was soon obvious that a strong cross wind would make the buoy approach interesting. It takes fine line judgement to put the bow near the buoy - and a fast bow-man to hook it and put it on the bow-post without losing some fingers. Fortunately, we got it on the first approach - but I'll admit to a little luck. It was a relief when we were finally secure.

Refueling went fast - and soon we had cast off - and making our take-off. As soon as we were airborne - we were aware of heavy cloudiness on our route south. Sure enough, the clouds thickened and extended upward. We were flying at 10,000 ft. to avoid that high plateau we'd seen the last trip - and even so we were soon into cloud and flying on instruments. We were obviously encountering the inter-tropical weather front that moves with the seasons - north and south. We encountered heavy rain, and lightning flashes in the cloud. We dodged them when we could identify the dark areas with lightning. But, mostly, we held a course and concentrated on flying straight and level. Fortunately, we were flying perpendicular to the front - and after an hour - broke out of the clouds and began to spot breaks to see the land below. Our position was uncertain, but the winds near the equator are light and little drift is expected. Visibility continued to improve - and we started looking for the Blanco or Negro rivers to get a fix. We finally saw them and estimated we were 20 miles east of course. I adjusted my heading toward Manaus - and soon picked up the radio beacon, pointing straight ahead. We arrived close to our ETA (Estimated Time of Arrival) - made a circuit of the city for the crew - and landed on the Amazon River.

After landing and getting secure at the dock - I was surprised by the entry of the Pan American mechanics calling out, "Where is the cake"? They were wanting our unused American bread - apparently hungry for it. [I gave them what we had - and promised to have extra bread put aboard on future trips.] En-route to the hotel - we stopped at the Opera to let the new crew see it. It was a most unusual sight - in a unusual city - in a unusual jungle area. Why performers would make the long trip up the Amazon to come here puzzled me. But, maybe the compensation induced them to do it.

When we boarded the next day - the familiar smell of rubber was dominant. After we made our take-off, the smell lessened by the airflow from the aircraft. We had a repeat flight through the inter-tropical front but this time the weather was less violent - due to the early morning and lack of heat to build up the cloud. After breaking out of the cloud, we had a nice flight to Puerto Carreno. I wondered about the cross winds and current - but happy day - we lucked out. The current ran east - and the wind was out of the west - so the approach to the buoy was up river and up wind -making the buoy approach dead simple. This was a lucky day.

Our continuing flight to Barranquilla was uneventful - even the river landing there. We searched for submerged trees - but found none. (The previous landing, however, remains vivid in my memory.) Our stay at the hotel provided a great dinner - and afterward we went for a walk at the square - to watch the young people nightly promenade and flirting with one another. Then, it was early to bed - for the early rising.

The following day's flight across the Caribbean area was enjoyable - and uneventful. It was good to be back home again.

July 27, 1943 - our second son, Thomas was born while I was away on a Pan American flight. Wilma and I were hopeful that my assignment could be completed before the child's arrival, but it was not to be. Our neighbor and good friend, Carl Fien, volunteered to drive Wilma to the hospital. Later, he was appalled to learn that Wilma delivered the baby a short time after he brought her there. Only when I arrived home, did I learn that our family now had two sons, and that Wilma and the child were fine. July in south Florida can be hot, so I remember Tommie wearing only a diaper in those early hot days. But, he prospered. It was his mother that had her hands full with two young boys.

I continued to fly the "Rubber Run" to Manaus regularly until November 1943. When I arrived home from a trip, Wilma met me at the door with an interesting story. She said that she had received a phone call from a person who wanted to buy our house. When she replied that it was not for sale - the person's response was, "Why not" - as I hear your husband is being transferred to the Pacific Division"? That was stunning news - and known to a stranger before I was notified. But, it was true - and confirmed by Pan American when I called. We were moving - and I would be flying the Ocean Clipper planes - with a title of Master Ocean Captain. The war was accelerating expansion and promotions - but I was thrilled with my new prospects and challenges.

We called the folks who wanted our house - and quoted them a price of \$11,500. They did not negotiate a bit, but said, "Sold". We were pleased and felt like we were rich. We had occupied the house for 18 months and sold for \$4500 profit.

The same day we sold our house, we bought a travel trailer for the trip to California. We had seen an advertisement for the trailer that stated - New, 22 ft., and fully equipped to sleep four. When we inspected it, we were very impressed. It had blue linoleum flooring, mahogany panel walls, stainless steel kitchen, and full bath. The cost was \$1200. The man had bought it to surprise his wife - now she refused to set foot in it. He was mad - and ready to sell. We bought it - and anticipated our cross- country trip to California. On the test runs, I found it towed well, the manifold air brakes worked well - and would accommodate our family very comfortably. California - here we come.

On the day of our departure, we said our good-bys to friends and neighbors - then left to drive down the road. At the first STOP street - I applied the brakes - and came to a screeching halt. Something was wrong. I checked the brakes but found nothing. I drove ahead but when the brakes were applied - a screeching halt occurred. I disconnected the air brake system - and used car brakes only to continue. Then - about mid-day, I saw a brake repair shop and pulled in. The Manager did not want to check our system - as he was too busy. When I told him my drastic need - as I was en-route to California to fly the Pacific for the Navy - he readily consented. I explained my problem - and he said that obviously some thing was clogging the system. He said that he would blow out the line - and I should catch what came out. He blew - and I caught about 30 hard blue berries in my hand. Where did they come from? Then I remembered. I had parked the rig by a berry bush the day before - with the open air brake line upended. When questioned, our 2 1/2 year old Robbie readily admitted that he had picked berries and put them into the hole of the brake line. Eliminating the berries, our brake system worked very well.

(Moral - don't provide a berry source and a hole to put them in - for a 2 1/2 year old.)

Our route, diagonally across central Florida, was primarily on dirt roads that ran through small towns. This was primarily cattle country - with no hint of tourist development. We made good speed, as there was little traffic to slow us. This changed when we reached north Florida with primary roadways, and a greater number of houses and tourist facilities.

Our routine for travel was, an early rising, breakfast in the trailer, so we could get an early start. Sometimes, we would skip breakfast, then look for a bakery where we could get fresh donuts and sweet rolls to eat with cold milk. At noon, we'd find an attractive pull-off spot to park. As Wilma fixed lunch, I'd often take a short nap. After lunch, I would drive while Wilma tried to nap, if two boys didn't demand her attention. Toward evening, finding an overnight parking place was sometimes a problem. When available we would stay in a designated camping site. When not available we would look for Rest Areas on the highway, off the road in the desert, and one time in a gas station that was closing for the night. The owner even gave us an electric line for trailer power. Wilma and I remember that cross country travel with two small children as a very enjoyable one. People were very kind and considerate of us - and often helped in many small ways. We stayed in some remote areas of the desert - and enjoyed the sky, howling coyotes, and the quiet - all without concern for safety. That was then - but inadvisable now - and that is sad. But, the memories are wonderful.

BOEING - 314

IN

WORLD WAR II SERVICE
(Shown on the next page)

Statistics: (See two pages preceding p. 37)

All aircraft in the Pan American fleet were available for military service as need was determined during World War II. Pan American contributed to the war effort with contracts to the Navy in the Pacific theatre, to the Air Force in the European theatre, and to the State Department for the Caribbean and South American commercial flights.

The Boeing 314 was used mainly for the long distance flights San Francisco to Honolulu - then utilizing the Navy PBM for flights to the South Pacific theatre. On the Trans-Atlantic flights, the Boeing 314 was used for mid-Atlantic and south-Atlantic crossings to Africa - thence onward to Marseilles, France.



BOEING 314 - Capt. - San Francisco, CA "War time Navy Contract- Pacific (1944)

U.S. NAVY - PBM

(Shown on the next page - upper right inset)

U.S. NAVY - PB2Y3

(Shown on the next page - lower center)

The Navy designation PBM (2 engine) and the PB2Y3 (4 engine) were aircraft utilized in the Pan American contract for the Navy Air Transport Command in the Pacific theatre operation during World War II. Pan American's Boeing 314 and the PB2Y3 were utilized for the long range flights California to Hawaii - then transferring the loads to PBM for the onward flights to the South Pacific war theatre.

Jan. - 1944 CAPTAIN - SAN FRANCISCO (Pacific)
(Transfer to San Francisco, Cal. for US Navy Contract)

We arrived the San Francisco area in January 1944 - after a transcontinental auto trip towing a RV trailer. The Pan American base of operations had been moved from Treasure Island in San Francisco Bay, to the bay waterfront at the San Francisco airport, south of the city. After reporting my arrival, I was given time to find a domicile, before reporting for duty. We found a beautiful house for sale in Los Altos (between Palo Alto and San Jose) that was 30 miles south of the Pan Am base. It was a 3 bedroom, two bath, Ranch style house with all knotty pine interior walls. It was set on 3 1/2 acres of apricot orchard (123 trees) bordered by almond trees around the perimeter. It had a garden behind the house, and lots of play room for the children. We liked every thing about it - except the sobering price of \$16,000. After a sleepless night of considering, we decided to buy it - risking a \$11,000 mortgage @ 3 1/4 percent interest.

While we waited for the processing and closing date - we were permitted to park our trailer on the property beside the garage. We were allowed to take power from the garage for the trailer - and we could use one house bathroom. That meant, technically, we were not living there. Practically, we could enjoy the house and property as though we were in residence. Soon, however, we closed on the house, and it was ours to fully enjoy.

Reporting to Pan American for flight duty, I found many changes from the 1941-'42 years at Treasure Island. Pan American was now under contract to the Navy for its Pacific flights - under the MATS program (Military Air Transport Service). We would wear a MATS uniform for military designation in the war zone - in case of capture by the Japanese. And, it served as identification when on our own military bases. The aircraft I would be flying was the Boeing 314, the China Clipper (M -130), the Navy PB2Y3 and the Navy PBM. All were four engine flying boats, except the PBM that had two engines and used primarily Honolulu into the South Pacific area.

The Boeing 314 was the preferred aircraft to be assigned, as it was more familiar, and more comfortable and reliable. It was also the aircraft of choice for the VIP's that were on government priority flights. Very often, we carried high ranking military officers, diplomats and war correspondents that were in the news.

I was in the Men's Room shaving one morning, when I realized my adjacent neighbor was Lord Mountbatten. We chatted, and contrary to the stiff formal diplomat, he was relaxed, congenial and personable. He expressed interest in seeing the upper deck with the cockpit - so I invited him to visit. When he arrived, he asked many intelligent questions about our flight operation - and expressed his appreciation when he left. He made a very favorable impression on the entire crew.

There were many Navy Officers of high rank that flew with us. I had an Admiral aboard on one trip who requested a desire to observe the landing at Pearl Harbor. So, I invited him to occupy a jump seat in the cockpit - which is ideal for sightseeing. I made a circuit of the area for him, and then came in for a very smooth landing. He was impressed, and complimented me on the landing, adding, " You can always count on a

great performance from a Navy pilot". I couldn't resist - and replied, "I'm sorry Admiral, but I was trained by the Army Air Corps". He smiled - and slowly shook his head. (I could have added that my flying boat experience was taught by Pan Am Navy pilots - but didn't.)

I do not recall a flight on a PB2Y3 that was not tense. It was an airplane built by Consolidated, four engines, and retractable wing floats. It was a Navy version of the B-24 built for the Air Corps. The tension started right from the take-off. The aircraft was under-powered, and took a long run on the water to reach take-off speed. To reduce drag on the take-off run, the procedure was to retract the wing tip floats. But, in case of an aborted take-off - the wing tip floats had better be lowered - or you would undoubtedly bury a wing and engine into the water. When you finally reach take-off speed, and break clear of the water - it took 90 more seconds before reaching 3 engine speed. If an engine failed in those 90 seconds, your only option was to land straight ahead - and remember to get those wing floats down. (On limited take-off areas, that made it a little hairy - especially with obstacles or open ocean ahead.)

Being heavily loaded, a step climb procedure was used to reach a higher and more desirable altitude. As we burned off the weight of fuel, we could climb to a higher altitude. On one of my PB2Y3 flights - we were so heavily loaded that I was cleared for the ocean crossing San Francisco to Honolulu at 1000 ft. After 8 hours, we could have climbed higher, but the weather made it more attractive to stay at 1000 ft. But, the low critical altitude was tense for the pilots - and tiresome.

The comforts on the PB2Y3 were minimal. There was no insulation, so the plane was noisy and cold. We did have bunks for crew rest, but with the noise, vibration, and cold - it was fitful at best. The engines were prone to failure - so one was kept tense listening for any variation in the engine beat. We could have hot meals on the plane, that the crew prepared themselves. We ate a lot of eggs - as they were easy to prepare. The stove was electric - with top burners. Unfortunately, just above the stove were fuel lines that very often had a weep. That means it is not leaking, but only occasionally produced a drip. It is not considered dangerous, but when it hits a hot stove top with a zzzip - it gets your attention. But, my stomach was more demanding than my nerves - so I learned to ignore it. I should not have any complaints - as the PB2Y3 never let me down. It just kept me tense. (zzzip).

The long distance route (San Francisco - Honolulu) were flown by the B-314, M-130, or the PB2Y3. If we were scheduled to continue to the South Pacific, the PBM was used. It was a Martin built, 2 engine flying boat, that performed very well. Our route from Pearl Harbor was south southwest 500 N.M. to Palmyra Island - one of a small group of islands - and very remote. Palmyra had a bay for landing a seaplane - and was used as a refueling stop. It was operated by Navy personnel, and were very efficient.

Our refueling transit went quickly, and we were soon airborne for the flight to Canton Island, about 420 N.M. distance. En-route it was a lonely ocean - with miles to any occupied island. Canton was still operated by Pan American personnel and was a welcome stop. When it came into view, we looked forward to the fine dining room and the comfortable beds. The atoll still had its one tree - and the large bay within a circle. It was nice to be back. Pan American personnel operated the station - very efficiently.

There were two routes into the South Pacific that divided at Canton Island. One route led directly to Suva, Fiji - then onward to Noumea, New Caledonia to overnight. The next day, it continued to Brisbane, Australia. Return was over the same route.

The second route starting from Canton Island, was more westerly to Funafuti Atoll where we landed for refueling - then onward to Espiritu Santo, New Hebrides Islands. This was the site of a large U.S. Navy base that was actively supporting the fighting in the Solomon Islands and throughout the western South Pacific.

On one of my PBM flights to the South Pacific, I departed Canton Island for Suva, Fiji - a 600 mile flight. The weather was beautiful departing Canton - and forecast excellent all the way. However, after two hours, we started encountering increasing clouds - that continued thicker and higher. Ahead, we could spot a line of thunderstorms that were very high and flashing lightning. Soon, we were flying in rain - and then heavy rain with turbulence, lightning and light hail. We had about 30 minutes of this kind of weather, with occasional violent turbulence, - when suddenly we popped out into sunshine and blue sky overhead. For a moment, I thought we were through the weather, then I was aware that we were in a circle of good weather. For a space of 15 - 20 miles it was clear - but all around the circle were thunderstorms extending high above us. Then, our cockpit crew realized where we were - in the "eye" of a hurricane (typhoon in the Pacific). We enjoyed our short stay in the "eye", but we could not stay there. So, reluctantly, I turned on course across the "eye" and banged into the heavy weather on the other side. We had the same thick clouds, heavy rain, and turbulence - causing the copilot to follow me through on the controls to keep us level. Gradually, the weather lessened - leaving the thunderstorms behind - and flying in relatively smooth clouds. Further on, the clouds started breaking up and soon we were into clear weather again - and we could relax and have a cup of coffee. In another 1 1/2 hours we had Suva in sight - and approaching for our landing. When we went ashore at Suva, we were met by a meteorologist who casually asked, "Skipper, did you see any weather out on your route"? For a moment, I was speechless. Then, I gave him the details of our encounter - especially comparing it to our erroneous excellent forecast.

Instead of being abashed, he was delighted to learn of the weather. He said that he had begun to suspect a low pressure area was building in that region - and now we had confirmed it. He did express his regrets about our experience. We knew that he had few weather reports to go on for that area - so he could hardly be held responsible for the lack of accurate forecasting. We had an unusual experience, but it gave us a conversation piece - and a lesson. Don't always believe the forecast - as it is not an exact science.

While I was at Suva, I observed the natives - and they were big. They stood well over six feet tall and had big strong bodies. Even the women were big - so they were developing a large race of people. I was told that they were recently head hunters - and would eat their victims. I was somewhat doubtful - because they seemed like gentle people in spite of their size. But, it was confirmed - and even the natives will jokingly admit to the practice in stories they tell - all told with a big smile. Fiji natives love to sing - and had some of the most melodious voices I have ever heard. When a large group would sing - it was a very moving experience. They lived in open side structures made of wood and palm thatch - and cooked on open fires. It appeared that their way of life had changed little since ancient times - and apparently had no need to do so.

I was scheduled for a PBM flight to the New Hebrides. After the Canton Island stop, our route took us southwestward to an en-route stop at Funafuti. Our weather was beautiful (and was always so- as I remember) with lots of ocean to look at on the way. Funafuti is a very large Atoll - with a large protected bay within its borders. It had an airstrip that was used for refueling land planes being ferried into the Pacific war theatre. When the soldiers arrived to build and man the airstrip - the natives living on Funafuti were moved to a nearby island - to avoid possible conflicts. The native men returned daily to work at the base - and to attend their coconut groves.

Our seaplane landed in the protected bay of the atoll - and the scene was one of serenity - or paradise. It was sunny, with blue sky and blue waters, with the atoll shore lined with coconut trees - and an infinite ocean for a backdrop. The atmosphere was clear and mild - with a gentle breeze making it pleasant. By choice, we went ashore to do our paperwork, while the plane was being refueled. Our crew wanted to see the natives - and a chance to stretch our legs. While at the office, my first officer was overheard by a native complaining about constipation. The native came to him and said, "I fix". With that, he climbed a nearby coconut tree and returned with a small immature coconut. With a machete, he cut off the end and offered it to the first officer to drink. He did - and later reported that it was a successful medication.

There was ample room in the Funafuti bay for comfortable take-offs - and soon we were continuing to Espiritu Santo, New Hebrides. It was an easy navigation flight, for en-route was a volcano island, right on our course. As I approached the island, the volcano was smoking, indicating that it was active. I was curious, and decided to fly overhead to observe it more clearly. Bad idea. Just as we neared the volcano, it belched extra smoke, debris and heat - so it rocked our plane as we flew overhead. Fortunately, it did not affect the plane - and I learned a lesson. Don't fly too close to fire - or you might get burned

Landing at Espiritu Santu gave an insight into war preparations. Many warships were in the harbor, as well as multiple unloading cargo ships. This was the staging area for the fighting just north of here. Our landing was handled in a very military manner - with an urgency of no nonsense. When we went ashore for the night layover, we were directed to temporary barracks with basic amenities. In our contacts with the military personnel, I recognized the envy and longing in the eyes of those who had been stationed in the South Pacific for several years - and their knowing we would be back in the US in a few days. We, in the transport command, were very fortunate.

As I signed my departure papers the next morning, I was approached by an officer with a request. He was a pilot in a fighter plane going to Funafuti - and asked if he could fly alongside us, for better navigation to the Atoll. Of course, we would be very happy to provide this service. So, soon after take-off, we were joined by a fighter plane flying just off our wing. We enjoyed having him there - and he was happy for the safe navigation lead plane. All went well until we encountered a cloudy area. Then, he moved in close, as there was no way we were going to lose him. He was plainly visible in the cockpit - and waved to us. But, I was apprehensive about such close proximity. (I guess I had forgotten about my close formation in fighter planes.) When the clouds began to disperse, I was glad to see him more further away - so we could both relax. Finally, with

Funafuti in sight - he gave us a salute of "Thank you" - and peeled off to land on the airstrip. We maneuvered to land in the bay.

After our refueling, we would be making a daylight take-off. But, it was possible to make a night take-off or landing, by utilizing a lighted buoy line to indicate safe waters. I was reminded of a recent accident, by a Pan American pilot at Funafuti, when making a night take-off. Unfortunately, after becoming airborne, he stayed too low and crashed into palm trees on the shore. Witnesses said his engine power seemed normal - and no logical reason for the accident was obvious. Later, I experienced a night take-off that gave me a clue. I found that after getting airborne - and leaving the lighted buoys - the night is very black with no other lights for orientation. Then, reference to instruments is very important, to keep climbing - as there is nothing outside for a reference. In my opinion, this lack of reference led the pilot to relax his climb - and flew blindly into the trees.

On another of my transits of Funafuti, I heard a story that borders on the unbelievable. But, it was told to me, by those to whom it happened. I had a Navy flight crew of three men, join us at Funafuti as passengers, en-route to Pearl Harbor. I had been told that they were crash victims, so I was eager to talk to them. This is their story.

They were flying a Navy transport plane (2 engine) en-route to Funafuti when one engine failed and they started losing altitude. The command pilot sent word to the cabin crew to jettison cargo to lighten the plane. Unfortunately, they made a mistake, and opened the hatch on the side of the good engine. When they heaved out some cargo, it struck the propeller of the good engine, and a landing became inevitable. With no power to control the landing, they crashed and broke up the airplane on impact. The cabin crew were killed, but the cockpit crew survived. However, they had no time to prepare - so they found themselves in the water with no survival equipment. They found floating debris to cling to in the water. They were three days clinging to this plane flotsam. During this time, sharks came to investigate - and bit them hard enough to leave scars on their legs. Fortunately, they did not attack to kill. They were eventually picked up by a passing ship - and that is another story in this event - and a mystery.

The ship Captain told this story to the rescued Navy men. He was under way at night, when he saw a flare go up from the surface. He turned 90 degrees toward the flare spot that was now extinguished - and proceeded for one hour. Just as he was about to give up - another flare went up. He continued for another hour toward the direction of the flare - and found the three Navy men floating in the water - and rescued them. The mystery was - the Navy crew did not fire a flare, as they did not have a flare to fire. So, if the Navy crew did not fire a flare - then - who did? Did someone fire the flare - and then were missed on a rescue. It will never be known. Was it luck - or Providence that was looking after the Navy crew.

In the spring of 1945, the news report was that General Rickenbacker, World War I ace, was overdue on a Army Air Corps flight in the western area of the South Pacific - on which he was a passenger. Day after day, the reports came in that no evidence of a sighting were found - in spite of a wide spread search for the missing aircraft. After three weeks of searching, there was still no sign of aircraft or

life rafts with survivors.

I was flying a PBM schedule to Australia, while the news of the still missing General Rickenbacker was being reported (now 3 weeks missing). I had completed the Honolulu to Palmyra leg of the journey - and was now en-route to Canton Island. The aircraft was heavily loaded - with plywood and dynamite caps - so we were flying at 6000 ft. We had passed our mid-point location by about 30 minutes, when suddenly we blew a cylinder on one engine - and had to shut it down. As we were closer to Canton Island, I continued on course. The aircraft was so heavily loaded for one engine operation, we began to drift lower in altitude. I wondered if it would stay in the air - but when we reached 1300 ft. it was stabilizing with adequate speed and altitude. Then, another problem developed - as ahead we could see a line of thunderstorms that we would have to penetrate. I was concerned that we may not be able to maintain altitude and control if we encountered extreme turbulence. We did not have enough fuel to return to Palmyra - so our options were limited to continuing flight or land at sea. Sunset was due in 30 minutes - so if we were landing, it had to be in daylight.

Below, the sea was calm - and we could have made a safe landing - I thought. Then, my crew and I thought about General Rickenbacker and his being missing after 3 weeks - and did not relish the idea of not being found - if down at sea. Besides, we did not want to lose our plane. Our crew agreed to reject the landing option - and fly on into the storm. It was the usual heavy rain, moderate turbulence and lightning - and we were rather tense about the conditions. I could not hold flying speed and hold altitude - so we were slowly drifting down. Finally, at 700 ft. we could maintain that altitude - and flew on - hoping the one engine would not fail us while using maximum power. Glimpses of the wild sea below, made us appreciate the comfort of the aircraft - so we hung on and hoped. Fortunately, the weather front was not deep, and after about 30 minutes we noticed smoother flight and finally a break up of cloud. Finally, the aircraft flew out of the clouds and we were in the clear - and I began to breathe normally again. The radio beacon showed Canton Island straight ahead - and soon the light line of the landing area was sighted. A one engine landing at night was still a challenge - so I was particularly alert on the approach. Finally, it was obvious we were in the right position to land - and I did make a smooth touchdown. I must have still been a little tense - because the casual voice of the launch operator requested we taxi back - and then he would take us in tow. Dumbbell - didn't he realize we could not taxi on one engine - and it made me mad. So, a little sharply, I reminded him of our taxi capability - and requested he come to us. Then, I realized he was probably a young inexperienced war draftee - and calmed down.

I did not have to worry about sleep that night. I practically fell asleep at the dinner table - and when I did get to bed - slept for 12 hours straight. Our faulty engine was being replaced - and we would be delayed another 6 - 8 hours. The co-pilot and I decided to go to the beach to swim and do some fishing. We were told of a wrecked ship just off shore, that we could swim to. It had missed the channel coming into the bay and piled up on the atoll some months before. It was great fun to explore - and I wished I had scuba gear. Later, we did some fishing - and caught a nice string of fish. As we waded ashore in knee deep water, the co-pilot screamed and grabbed his leg. A small shark had followed the fish blood to its source - and bit his leg. Fortunately, it was not serious, but it left teeth marks on his leg - giving him a scar and a good fish story to tell.

After our PBM had the engine change, we made a departure immediately, because there was an urgent message inquiring about our ETA at Brisbane, Australia. Since there was an "urgent" to the message, our crew decided we would go to Noumea, New Caledonia for refueling as scheduled. Then, instead of taking crew rest, we would continue to Brisbane - thus making up most of the time we lost for the engine change at Canton Island. It worked out well, as we enjoyed good weather along the way. The crew did not mind the extra duty. This was especially so, when we arrived Brisbane and they were waiting for the cargo and started unloading it immediately. I've often wondered where our load of plywood and dynamite caps ended up - but I was too discreet to ask at the time. But, they sure were eager to have it arrive - and we were thanked for making the early delivery.

I was back in California when General Rickenbacker and the aircraft crew were finally located - on the 31st day of being missing. A search plane located the life rafts far from the expected area - and fortunately they were alive. They later told rather harrowing stories of survival. The flight became lost by following an erroneous compass heading that took them well off course - and they ran out of fuel before they could get properly oriented. They made a controlled landing in the sea - and were able to launch their life rafts and survival supplies before the plane sank. This saga, of the 31 days in the life rafts, makes very interesting reading. (I learned after the rescue, that a classmate at the Flying School was the Captain on that Air Corps plane with the General. His name was Bill Cherry.) I'm happy to have avoided that kind of experience with our PBM flight.

The wonderful RV trailer that we used on the Miami to San Francisco transfer, was not being used due to restricted travel by gas rationing. We decided it should be sold - and placed an advertisement in the San Francisco paper. We received several responses - but the most interesting one was the person who offered to trade a gold mine in northern California. We enjoyed the conjecture about accepting it, but reason prevailed - and we rejected the offer. We finally sold to a local person, and made a neat profit. It had served us well and I hated to see it go. And, if I had been able to look to the future - I would have retained it a few more months - for another transfer.

With the trailer money, we bought a hillside lot in nearby Mountain View vicinity. It overlooked the valley, and Wilma and I planned to build an adobe house on it. But, first it had to be cleared of poison sumac. That we did with axe and machete - creating giant piles that we burned. Happily, I was not allergic to poison sumac - but the oil transmitted by the heat of the fires may have caused some problems in the valley. But, I had the job completed before anyone discovered the source - and consequently had no complaints. Our ambitious adobe house was never a reality - as I learned of a transfer to the east coast was possible. It was sold before we left - making us a very handsome profit.

Our 123 tree apricot orchard was our pride and joy - but it entailed more work than I anticipated. Fortunately, I was contacted by an Agriculture professor, who wanted a project site about our size - to teach orchard management. He did it free of charge, just for the use of the land. He had it pruned, and fertilized, with the result of an orchard of

beautiful perfect fruit. Without exaggeration, the apricots were the size of medium peaches - and fabulously delicious. Tree ripened apricots, cool with the morning dew - were a daily enjoyment as I walked to the road for the morning paper. The Pan American office staff learned to expect a basket of fresh fruit, when I reported for my flight assignments.

Wilma and I liked our California home - and I enjoyed the Pacific flights - so we expected to make our permanent home there. But, it was not to be. Early April 1945, as I reported for a flight San Francisco to Pearl Harbor, the Chief Pilot advised me that I was being transferred back to Miami to check out on the land plane - the Army Air Corps C - 54. After check out, it was expected that I would fly in the Army Air Corps Contract for trans-Atlantic flights. This gave me lots to think about during my final trip on the Boeing - 314 in the Pacific Division. And, while I did not know it at the time - it would be my final flight - flying - "the flying boats". (Flying boats supplied an era when it was necessary - but now - more efficient land planes would take their place.) My final flight - a round trip from San Francisco to Honolulu to San Francisco is dim in my memory. But it must have been a routine and satisfactory flight. And, in retrospect, I am proud to have been a part of the "flying boat era" - and especially flying the Boeing 314 as a Master Ocean Captain for Pan American Airways. They pioneered and successfully achieved the mastery of commercial over-ocean flying - for the rest of the world.

After my final flight for the Pacific Division of Pan American, Wilma and I arranged to sell the properties we owned, since we had no clear possibility of returning in the foreseeable future. Absentee ownership did not seem an attractive choice. By late April 1945, our plans to move to Miami were complete - and Pan American gave me my final departure date. I was not sure what the future held at this time, but my part would be to aid Pan American's contract to the Air Corps by flying the Atlantic Ocean into Europe and Africa. That would be new horizons for me, and that is always attractive.

MILITARY - DOUGLAS C - 54

OR

(Shown on the next page)

COMMERCIAL - DOUGLAS DC-4

Statistics: (Built by Douglas Aircraft Company)

Length - 94 FT. - Span - 118 FT. - Height - 28 FT.

Take-off Gross Weight - 73,000 lbs.

Power - 4 Pratt & Whitney Twin Wasps (1450 H.P.)

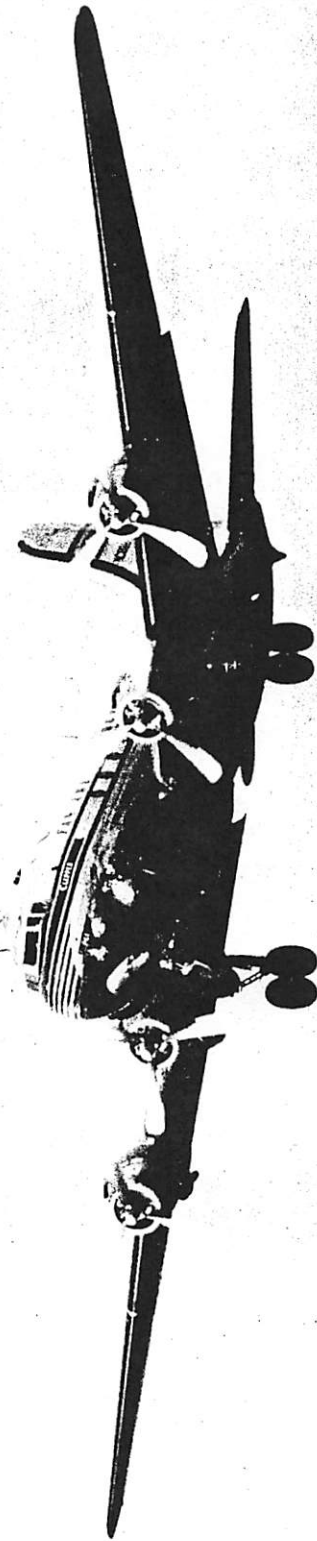
Speed - 215 MPH

Range - 2500 Statute Miles

Seats - 44

As early as January 1940, five Airlines ordered 61 DC - 4 aircraft. Pan American ordered three with pressurized cabins - but these were not delivered. Regardless, Pan American increased the order to 28 - for a bargain price of \$160,000 each. The DC - 4 made its first flight February 14, 1942 - and was very successful. By this time, the United States was heavily involved with World War II. The long range DC - 4 could not have come at a better time - for it was highly needed by the military services. It became the Army C - 54 and the Navy R5D. Douglas built 1163 - and they were used for 80,000 ocean crossings during the war.

As soon as the war hostilities ceased, the military C - 54s and the R5Ds were released in great numbers to the Airlines. Pan American had ten delivered by the end of 1945, twenty the following year, and additionally ones later for a total of 92 DC -4s. The days of the flying boats were ending. Pan American replaced the Boeing 314s on the California to Hawaii route with DC -4s. The new service took 10 hours versus 18 1/2 hours on the flying boat - and the fare was reduced from \$278 to \$195. The era of the flying boat was at an end.



DOUGLAS C-54 (Military) / DC -4 (Pan Am) Capt.- NY "Trans-Atlantic" (1945)

April - 1945 CAPTAIN - C-54
Transfer to Miami for C-54 Training

Late April 1954, Wilma and I left California with our two sons, for our fourth cross-country trip in 4 years, en-route to Miami, Florida. We planned to go via Michigan to visit our families for a brief time, before continuing to Miami to report to Pan American. I was transferred to begin flight training on the U.S. Army Air Corps C-54. When I reported, I was given the usual time to get "settled". Since my assignment in Miami was temporary, we decided to rent a house until our life settled down.. We found a modest new house in southwest Miami. Within a month after moving in, we had a test of structural integrity, and defects were found. A hurricane hit Miami with high winds (100 mph) and heavy rain. It was awesome - with shrieking winds, torrential rain, trees falling and power failure. Our house held together O.K. but the wind and rain came in through the poorly fitted windows and door sills. We dammed them with towels to keep them from puddling on the floors. Fortunately, the storm was fast moving, but it took quite a toll of damage in our area. For 12 hours, we found it a somewhat fearful experience.

The storm interrupted my flight training on the C - 54 - as all the airplanes had been flown out of the storm area. When they returned, my flight training resumed - and I received my aircraft qualification. The Douglas C - 54 was a 4 engine land plane with a steerable nose wheel. It was unpressurized - so flight was limited to 10,000 ft with passengers. Transition from flying boats was easier than I expected. Take-offs and landings from a stable surface of a runway was easier than dealing with the variables of a water surface. Taxi to a parking site was easier than making for a buoy to tie up. In the air, it was just another airplane, and it responded well to any maneuvers called for. It had proven to be a good , honest and reliable aircraft for the Air Corps Transport Command. I liked the aircraft, and looked forward to my assignments.

May 7th 1945, the war with Germany ended, and now the emphasis shifted to the Pacific and the war with Japan. However, much transport was needed out of Europe and Africa - and that is what I expected to be doing. Rumors were current that the transfers to New York were imminent - and were correct. Within the week, the junior Master Ocean Captains were getting transfer orders - and I was included. It was classified as a "temporary assignment" of 6 - 12 months. Family expenses would be paid for those making the move. I chose to make the family move decision, but temporarily Wilma and boys would remain in Miami, while I reported for duty in New York. While there, I would try to locate a house for the family in the New York area.

September 1945 - TEMPORARY TRANSFER - NEW YORK, NEW YORK
(U.S. Army Air Corps Contract - Atlantic)

I reported to the Chief Pilot's office in New York. I was directed to a shop for a uniform of the Air Transport Command - which they were able to supply in three days.

When I reported ready for duty, I was assigned a flight two days later. The route I would be flying was New York - Azores Islands (Santa Maria & Terceira) -Casablanca, Morocco - with a return over the same route.

My initial reaction to ocean flying in a land plane was rather negative. I was used to flying a boat hull plane over the ocean and considered it a safer proposition. But that was theoretical, as both would undoubtedly break up and sink in a rough sea. Reason prevailed - and soon the difference was ignored.

The Air Transport Command operation was well organized by 1945 - and flights were handled very efficiently at all stations. At New York, our Pan American personnel prepared the plane and its dispatch. At the overseas bases, we had a representative, but the plane maintenance and refueling were done by the military. On my first flight, my cargo and passengers were so heavy, we were directed to Bermuda for refueling, then onward to Santa Maria, Azores. This was new territory for me - and I enjoyed the change. Santa Maria was a small island (7 mile diameter) - southern most of the Azores group of islands that lie off the Portugal coast about 900 miles. The runway was very long - and was dish shaped in the center. The dish was no problem, but the runway kept dropping away on the landing, as it followed the contour of the land. (Water landings stay flat - but I'm not critical - just comparing.)

There is a crew change scheduled for Santa Maria. The Military assign our crew bunks in a Quonset hut barracks - and point out the Mess Hall that operated 24 hours a day for the many flights of all kinds that pass through. We had a 12 hour layover scheduled - long enough to eat, sleep, and eat again - then depart. The Mess was generous with the food - and generally it was tasty. Some persons did not like Spam - but I liked it fine. My dislikes were powdered milk and powdered potatoes. Dispatch had a schedule board that we could refer to at any time - showing our position for departure and within how many hours. That was kept current - and very helpful for planning.

Our plane arrived, and we were destined for Casablanca - a new bit of geography for me. It sounded strange and exotic - and I was eager to see it. The flight was easy - with little navigation required- and the weather was excellent. The airport was well away from the city - in a desert region of little vegetation. The military operated the airport, but many Arabian people were about. They were different in dress, customs and philosophy. When we were transported to the hotel in town, it was another world. Many men wore robes and a fez, the women in colorful long dresses, the street scenes noisy with horns, shouts, and crowds of people. Camels walked the streets - mostly carrying cargo loads. The scene was just like the movie Casablanca. After arrival at the hotel, I wanted to go walking, but was advised not to do so alone - it was too dangerous.

The next day, we started our return flight over the same route. We had a full passenger load of soldiers - that reported they were destined for the Pacific theatre of the war. Our flight went routinely - to Santa Maria - and a day later to New York. I was scheduled for six of these round trips to Casablanca - on one of which I learned that the atomic bomb had been used at Hiroshima, Japan. Aug. 14th 1945 - the Japanese sued for peace - and by Sept. 2nd they completely surrendered. The war was over.

During the time I was making my flights to Morocco - between trips I was looking for a house for my family. Being near New York City did not appeal to me, so I was looking in Westchester County - 50 miles out of New York to the north. I found two choices - one a large 5 bedroom Colonial - or a small house that looked like a "Ski Lodge". I chose the "Ski Lodge" because it was interesting and small enough to heat economically in the winter. In October, I returned to Miami to reclaim my family and bring them to Truesdale Lake, South Salem, N.Y. - where our "Ski Lodge" was located. We enjoyed the "Ski Lodge" - especially the boys - sleeping in an upstairs loft. Keeping a coal stove going for heat however, was somewhat of a problem. Two of our Pan American friends lived close by - so we were pleased with our location.

With the family with me in New York, having only one car forced them to take me to the airport for my flights. It was somewhat of an adventure, but sometimes at night, it could be inconvenient. In November, I was assigned a Casablanca flight. Upon my return, I was notified to see the Chief Pilot. Curious, I reported immediately - and was informed that I was assigned to a special Survey Flight - to investigate future routes to Europe and the far East in this post war period. The flight would depart Dec. 6th - to be gone about 6 weeks. The Captain was Sam Miller - and I was assigned as First Officer - thus having two Captains available, if needed on the flight. The Survey Project was headed by a former Pan American Captain - now in Administration. He would have a staff of experts in all aspects of airline operation - including aircraft maintenance, passenger sales and service, meteorology, communications and flight operations. Our group would number about 25 persons. Pan American was preparing for the post-war commercial aviation era - and Pan American hoped to pioneer new routes to service.

Our aircraft for the Survey Flight Project was a newly renovated C -54 - now designated the DC - 4 - with all the latest configurations and equipment for passenger comfort. It was attractive and functional - meant to impress officials and airline personnel we meet on the flight. It was newly painted with PAA colors and logo. It was suggested that I take many cartons of cigarettes - for tips and barter - when we arrived in the military area of Europe where script money was used. Later, I found this was good advice.

Leaving Wilma and the boys, for such an extended time in a new neighborhood, was an unattractive situation. We contacted Wilma's parents in Muskegon, Michigan to see if they could stay with them for that period I was gone. They consented to the plan - so arrangements were made for them to go by train - just before my departure. Wilma, two small boys, and our Dalmatian dog left from Katonah, NY - to go to Grand Central Station, NYC. From there, they would transfer to the train to Muskegon, Michigan. The dog was traveling in a crate in the baggage car - and when it was taken out for watering at Grand Central Station - escaped into the streets of New York. When Wilma was advised - her train was ready for departure - and she had to leave. Our Dalmatian dog was never seen again. My hope was - he found a home at a fire station - and became their mascot. Wilma was distressed at the loss, but she had two demanding boys that needed her attention.

It would be a long absence from my family - especially during the coming Christmas holidays. I was pleased that they would be with Wilma's parents where the boys would get the attention of grandparents. The afternoon of December 6th, I reported to Pan American for that evening departure. It would be an unusual trip - and one could not help but be excited t the prospects. Captain Sam Miller and I had been classmates at the flying school, although not close friends. He was a very friendly and agreeable person, and I looked forward to working with him. Our Project Manager was unknown to me, but struck me as cool and officious. The investigative personnel were all new to me, as they were New York based and unknown.

Dec. '45 - 1946 PAN AM SURVEY FLIGHT
(Survey for Post-War commercial routes)

December 6th - '45. There was an air of excitement among the PAA Survey Group as we prepared to depart on this Survey Project. It promised to take us to many new places and new adventures. Our first leg of the journey would follow the standard route to Gander Field, Newfoundland - estimated to take about 5 hours. After take-off, we headed for overhead Boston, continuing to Nova Scotia, over-heading Yarmouth, Halifax and Sydney. Crossing the Gulf of St. Lawrence, we were over Newfoundland and soon making our landing at Gander Field. This was the departure point for many military flights across the North Atlantic. After an hour for refueling, we were airborne and headed for Shannon, Ireland - 1975 miles away. The DC -4 was unpressurized so our flight was restricted to 10,000 ft. or below. It was expected to take us 8 hours and 25 minutes. The night flight permitted the Navigator to take celestial sights to keep us on our projected route. We were over the North Atlantic - with lots of cold water below. I was told that if you ever ditch - avoid getting wet when launching your life rafts - or your survival time is 7 minutes. Half way across, we made contact with a Coast Guard vessel that stays on station for any rescue that may be needed. He also transmits a radio signal, that allows us to home in for an accurate location fix. We talk to the radio operator on VHF radio, as we pass overhead. It is lonely duty steaming around in a 5 mile circle - and the seamen look forward to the relief ship that is due in a week. Shortly after passing the Coast Guard vessel, first light begins to show in the east. (Always the "low spirits" part of the flight.) Within 3 hours we should arrive Shannon, and when we sent our "position report" Shannon reported excellent weather for landing. It was a beautiful sight when we crossed the Irish coast, as the vegetation from so much rain was a deep green - and was rightly named, "the Emerald Isle"

After landing, we were met by local dignitaries who extended a warm welcome to us. Afterward, we were invited to enjoy an Irish breakfast - with hot oatmeal, fresh rolls and strawberry jam, eggs and sausages, cheese and coffee. After a long night and a cold crossing, the breakfast was very welcome. The airport was beside the Shannon River, adjacent to the site where the flying boats landed. Now, a new era of ocean flying in land planes had arrived.

A short flight, Ireland to London, England that would take us 1 hour and 50 minutes - and the initial part of our journey would finish. Leaving the Irish coast, we crossed St. George's channel, then over Wales just north of the Bristol Channel. Over Cardiff, we were cleared to descend for our landing at a military airport southwest of London. As we were driven to our hotel in London, I was depressed with the dark smoky atmosphere of London (burning soft coal) - and further dismayed at the devastation of whole areas that had been bombed in the war. But, the spirit of the people, as victors in the war, was upbeat and optimistic. We stayed in a modest hotel, but fortunate to have it available. We were given rooms that were unheated, but heat was available from a gas heater - if you fed it shillings to make it work. Our meals in the dining room were plentiful, but plain cooking. I liked the hot tea - and the Crème Caramel pudding.

Our Survey Group met daily to plan - then dispersed to gather the information they wanted. Our cockpit crew was able to obtain the information we needed - as it was

readily available. We found that air traffic control was non-existent except at airports - for take-offs and landings. En-route each flight was responsible for its own safety.

Several of our group wanted to take a sightseeing trip of London - and we were able to get a cab to drive us about. The driver took us to the usual tourist sites i.e. Trafalgar Square, Parliament, Big Ben, Tower of London and the London Bridge, and Buckingham Palace. Everywhere we went there was war damage near by, but generally the city was quite orderly. And, the indomitable spirit of the British people was evident.

The Survey Group seemed satisfied with their investigations - so after 3 nights in London, we planned to move on. Our next destination was Brussels, Belgium. After take-off at London, I was able to see the Cliffs of Dover as we crossed the English Channel. After crossing the coast, it was a short flight to Brussels. We landed at an airfield that seemed new - and was almost entirely free of damage. There was a large greeting party of dignitaries. While our Survey Group met with the welcoming party, our cockpit group met some operation personnel. They were able to furnish what data we requested - consequently we finished our work the first day we were there.

The drive into the city disclosed little or no war damage. The buildings we saw were solid, well built structures typical of turn of the century. Our hotel was of the same era - and furnished with rich but old fashioned material. The dining room was formal - and the meals were excellent and served with elegance. However, we discovered a bar where we could get outstanding sandwiches and beer. It was found as we walked the area to see the sights. Brussels was attractive, in an old fashioned way, but it was what we expected to see.

By Dec. 12th, we were ready to move on to Paris, France. The flight was only 1 hour 15 minutes away - so we were over the border and preparing to land, with little sightseeing en-route. Paris was most attractive, as we saw it from the air. The Seine River runs through the center of the city, and the Eiffel Tower stands out for a good landmark. We maneuvered the plane so all passengers could get a good view of the city. Unfortunately, we would not be staying there - as we were only transiting to make a scheduled meeting in Germany. We did have lunch at the Paris airport. Then our Survey Group met with local officials, while our cockpit members met with an Operations group to obtain some data material. While we were with them, we discussed the subject of Air Traffic Control - which did not exist in Europe at that time. The French pilots present, opposed such controls. Their argument was that it was unnecessary - saying the chance for two aircraft to collide in all that airspace was slight. Then, they added, "Besides - what the hell - are you afraid to die?" Interesting, but fortunately, their philosophy did not prevail. Air Traffic Control was set up world- wide within a few years.

By mid-afternoon, we were ready for departure for Frankfurt, Germany. Our flight took us over the city of Reims, then crossed the country of Luxemborg, over the Mosel and Rhine Rivers, the city of Weisbaden, then started our approach for the Rhinemain airport just southwest of the city. It was a large military airport, with dual runways that now had military aircraft on the south side of the field, and commercial aircraft on the north side. We taxied to the north side, where a large contingent of officials waited to greet our Pan American Survey Group.

Apparently, some of the German officials expressed a wish to see the aircraft, so the flight crew stayed aboard to answer questions. The DC -4 did look attractive with the new Pan American logo - and when we showed them the interior - they were impressed and very complimentary. They asked questions of every nature - from the cockpit, to the galley, the passenger service and the emergency gear. Post-war aviation was getting a lot of attention.

I was not aware of much war damage at the Rhinemain airport - although it could have been cleaned up recently. But, our trip into town was a different story - where every block of the city had damaged buildings. Some blocks were almost entirely destroyed - with the debris shoved into piles so traffic could go through. I had expected to see damage from news media - but this was extreme and depressing. The people we saw on the streets walked silently and disinterested in the scene about them. They were a defeated people - and reflected it. A few cars were moving about - but invariably it was military or obviously Americans.

Our hotel was near the train station, and surprisingly it was relatively undamaged. I guess the bombers were concentrating on the station. Our hotel was under military control, but the staff was German nationals. We were well handled and given very good service. We ate all our meals at the hotel and the food was excellent. We awoke early the next morning and stepped out of the hotel for a moment. Long lines of people were walking to the workplaces. We were told they worked 10 -12 hour days.

Our cockpit crew returned to the airport - and quickly obtained the operational material we needed from the military office. We had been informed that we might make a local flight for some of the Frankfurt officials. We were ready when they arrived late morning - and then flew a :45 minute ride around the city and local area. Again, they showed great curiosity about the aircraft and asked lots of questions, and inspected everything. When the flight was completed - we were invited to be their guests for lunch. It was typically German - pork, sauerkraut & potatoes - served with big pitchers of beer. After lunch, we returned to our hotel - with a slight deviation to view more bomb damage to the city. Frankfurt had been hit hard because it was industrial. We spent the evening at the hotel - then off to an early bed. Tomorrow we go to Vienna, Austria.

Our flight to Vienna was estimated to take 2 hours - going via Munich, just north of Salzburg, over Linz - and following the Danube River to Vienna. I thoroughly enjoyed this beautiful flight - with scenes of mountains, green fields with cows, farm houses and extensive fields. It looked just like the story books. We arrived about noon - and were met again by a large contingent from the city, with an enthusiastic welcome. Happily, we found they had planned a brunch that was well received. We were served cheese, omelets, sausages, cold meats, with several breads, coffee or tea, and carafes of wine. This is great country for hearty food - later we'll discover pastries.

Our drive into the city showed little war damage - and the shops were open and busy doing business. People were walking, but seemed well dressed and in good spirits. Our hotel was the Grand Hotel - one of the finest in the city - but now under military control. The hotel staff was all local citizens. Our meals were to be taken at the hotel dining room - that was famous for its cuisine.

After getting settled in the hotel, I was anxious to take a walk around the city area. When I left my room, I was aware I had left a bag of laundry on the bed. When I returned a couple hours later, I noticed my laundry was gone and wondered if it could have been stolen. Before I could complain, a knock on the door came and the maid came in with my laundry - washed and folded ready for use. She had no bill for the laundry, but indicated she would accept a tip of cigarettes. I offered her an unopened pack of cigarettes. She seemed surprised - and then exceedingly grateful in her thanks. Later, I learned that the pack was worth \$20-30 on the local economy - and that two cigarettes would have been a normal tip.

In the dining room that night, we were entertained by a world famous orchestra. I noticed that the conductor was accepting requests and I inquired to confirm it. I was assured that the orchestra would appreciate requests - and would accept two cigarettes as a tip. I was further warned not to exceed the usual custom. Now, I understood why the laundry maid was so grateful for a package of cigarettes as a tip. I was to learn more about the cigarette exchange. The maid - and the orchestra persons - would not smoke the cigarettes, but would use them as exchange for trade goods. I have often wondered how often the cigarettes were traded before finding a wealthy smoker. The war sure generates some strange ways.

After our cockpit crew completed their survey information, we found time to go sightseeing. Vienna is a great city for shopping - offering quality goods displayed in the windows. The city architecture was old world in appearance, but solidly built to last. We passed the palace, but it was guarded by locked gates. Everywhere we went in the city, we found music coming from restaurants and wine shops. We went in a wine shop and found a very pleasant atmosphere - and good wine. We found no hostility among the people, but to the contrary, were friendly and hospitable.

Dec. 18th. We were ready to make our next flight. We planned to go to Berlin directly, but a change was announced. Now, it was planned to land at Prague Czechoslovakia early, do our Survey work - and continue to Berlin that same day. It was not to be. The flight to Prague was 1 hr. and 5 minutes - and we arrived at 8 AM - hoping to quietly slip in and out by noon. But, we were met by the Prague officials - who welcomed us with speeches and an invitation to a breakfast. Our Survey Leader tried to refuse - but found the hospitality of the officials too great to ignore. So, we enjoyed one of the finest spreads of food one could imagine. It still lingers in my memory. The occasion became a party - with toasts of vodka and speeches. It became obvious that we would not go to Berlin that day. Our Leader was obviously in a black mood about it, but everyone else seemed pleased to enjoy the hospitality - and later a tour of the city.

Unfortunately, the next morning as we prepared to depart, a high Czech official was reported as having committed suicide by jumping from his office building. He had been a popular leader in his country - and local people hinted that he was probably murdered by the Communists because he opposed their regime. The same opinion was expressed by the news media - who carried the story later that day.

Dec. 19th. Losing a day in Prague, would cut short our time in Berlin. We made an early departure from Prague - with an estimated flight time of 2 hrs. 13 minutes. But, we were delayed by the Russian control of the corridor we had to use to approach Berlin.

We were kept busy following their instructions - consequently I had little opportunity to observe the city. What I did see was appalling, for there was widespread devastation from the Allied bombing. Once we were on the ground, and en-route to our hotel, we could see whole blocks of buildings that were partially or totally destroyed. Streets were filled with rubble that had been pushed into piles to allow vehicular traffic. I had seen similar pictures of bombed Berlin, but seeing it personally made it seem worse. This is reality - that "War is hell" - in material loss. The human suffering must be even more so.

We checked into a U.S. military housing facility for our overnight stay - including our meals. It was a comfortable facility, but little to recommend it for attraction or good food. But, I'm sure many Berliners would have been happy to enjoy it.

That evening, a knock on the door, and I opened it to a Sergeant who inquired if I had cigarettes to sell. He offered \$200 per carton in script. Since we would be leaving the military area where script was in use - I agreed to sell him my remaining 5 1/2 cartons for \$1100. Both of us were pleased, as he could expect to resell for \$300 a carton. (Later, I was to learn that these black market deals were illegal. But, with the war over, the rules were generally ignored.) I exchanged my script at the airport for U.S. dollars - and the profit would cover my expenses for the rest of the trip.

Dec. 20th. - Our flight departed Berlin early morning - and planned a temporary stop in Budapest, Hungary - later to go on to Vienna. Following the Russian control of air traffic in our departure corridor, we were delayed about 30 minutes - adding to our expected flight time to Budapest of 3 hrs. 45 minutes. Once free of the Berlin area, our flight went smoothly and we landed just before noon, at a military airport under Russian control. Time was limited - but the Survey group departed to assemble what they could - with instructions to return by 4 PM. Our cockpit group stayed at the airport to gather operational data. We did not get unqualified cooperation from the Russians, but some of the problem may have been language. International aviation was supposed to use English, but theirs was very limited. Our Russian and Hungarian language skill was nil.

Our Survey Group returned at 4 PM - and by 5 PM we were taxiing out for take-off. Vienna was only 50 minutes away - and soon we were crossing the border and the Danube River next to Vienna. I remembered the "Blue Danube Waltz" music - and it must have been blue at that time - but it sure was brown now. That night, at the Grand Hotel, I made my two cigarette request for "The Blue Danube Waltz" of this wonderful orchestra. It was beautiful - and still a favorite of mine - with recollections of the Grand Hotel.

Dec. 21 - 23rd. The spirit of Christmas was catching up with us in Vienna - as we walked the streets to see the shops and hear the Christmas music, It seemed to be coming from every other shop as we strolled along. Before long, we found a wine shop with music, laughter and dancing - and we joined them to enjoy wine and cheese snacks. The Survey Group used their time to consolidate their data - as Vienna was a prime location for the future. Our Survey leader finally announced that we would depart tomorrow for -"Christmas in Rome". That was well received by all of us - and I looked forward to my arrival there. This would be a "first" - one of many on this trip..

Dec. 24th - We left Vienna for Rome, Italy. Our route was over the eastern Alps to Trieste and Venice - crossing the north end of the Adriatic Sea to Bologna, Italy and south to Rome. The three hour flight was unsurpassed for scenic beauty and interest. It had everything from fabled cities (Venice and Trieste), mountain Alps, the colorful Adriatic Sea, the Italian Alps, hills topped with walled cities, and beautiful fields and vineyards north of Rome. En-route we identified the small independent country of San Marino. It remains a memorable flight to this day.

Rome airport is well outside the city - but it gave us a most scenic ride through farm and grove country to arrive at the city. Entering the city, we passed old aqueducts that are in use yet today. We passed right by St. Peter's cathedral - that was awesome in size and beauty. Our hotel was near the center of the city, with the famous Spanish Stairs just outside our hotel entrance. From my hotel room window, I had a panoramic view of the hills of Rome, and a most interesting city scene. Somewhat later, we were able to get a cab to drive us to some of the tourist interest sites, including St. Peter's Cathedral, so we could walk inside and marvel. We stopped at Trevi fountain to toss in some coins, and drove around the Colosseum - marveling at the size, and the stories of events that happened there. That included gladiator fights, wild animal fights and even staged naval battles.

Rome food and drink are among the world's finest. The rich pastas are well known, but the fruits are outstanding also. The wines are plentiful and very cheap. I was amused at the cafe wine prices - they were the same as bottled water. Naturally, we chose the wine, at those prices. Our stay in Rome was short, but we managed to see and do a lot, but there is much more, and I look forward to a return. Now, we are preparing to fly to Athens, Greece for a brief stop - then on to Ankara, Turkey.

Dec. 26th - Reluctantly, we departed Rome for Athens - flight time 3 hrs. 45 minutes. After take-off, we turned southeast to fly over Brindisi on the east coast, across the Straits of Otranto, over the Ionian Islands to the mainland of Greece. Again, we were struck by the beauty of the land and sea in this Mediterranean country. Athens was nestled near some low hills, but the approach to the airport from the south was excellent. After landing, we were met by a large reception party, and invited to lunch at the airport. Athens and the countryside of Greece looked interesting - so I hope I can return at some future date.

By mid-afternoon, we were ready to continue our flight to Ankara, Turkey - the recently designated capital of the country. We flew northeast over the Aegean Sea, across southwestern Turkey to overhead Istanbul, where we could easily identify the Bosphorus leading to the Black Sea. When we crossed over the Bosphorus, we had passed from Europe into Asia - continuing eastward to Ankara. Our flight time had been 2 hrs. and 38 minutes - and we landed just before sunset. The airport is in a bowl - surrounded by hills. It requires close adherence to altitudes approaching the airport - especially so in instrument weather. The airport had excellent facilities - for taxi, parking, and the terminal. We expected to remain here for several days.

We were registered at a small but new hotel, so it was modern and comfortable. We were instructed to have our breakfast at the hotel - and our noon and evening meals at

a nearby restaurant called "Papa's". We heard that he had previously been located in Istanbul, but when the seat of government moved to Ankara, he was encouraged to move too. We met "Papa" the first evening we had dinner there - and he cut quite a figure. He was a big man - and wore old style Turkish traditional costume of baggy pants, flowing white shirt and bandana around his neck, and topped by a red fez on his head. He had a long mustache and dark piercing eyes that commanded attention. He was a most cordial host and welcomed our small cockpit group in a most expansive manner. He saw us to our table - and called waiters to attend us.

Somewhat later he returned to check our service - and suddenly he became very agitated and shouted for the Head Waiter. We wondered at the commotion - but soon "Papa" was expressing his regrets to us - because ice water had not been furnished to us. Soon, the ice water arrived - and with it a kilo can of caviar for our table- as an apology from "Papa". (Every evening thereafter, we were served a kilo can of caviar, with "Papa's" compliments.

The food at "Papa's" was superb - and our flight engineer kept wondering about the menu item called "Flaming Pheasant". The last evening we were there, we urged him to order it and satisfy his curiosity. After all, Pan American was paying the tab. So, he did - and we were all eager to see this special dish. Time passed - and finally inquiry was made about its service. The Head Waiter assured us it would be soon. Suddenly, there was a fanfare and the lights dimmed - and the trophy dish appeared at the doorway. On a large tray, borne by two waiters, was a pheasant in full plumage, with wings outstretched as if in flight - with burning sparklers stuck in its back. They carried it to our table - with applause from the restaurant patrons - and presented it to the flight engineer. By this time, he was a bit awed and slightly embarrassed, especially when we joined in with the applause. It was hilarious. When the sparklers extinguished, they were removed along with the feather covering on the bird. When he was served the bird, he reported it as "outstanding". All the rest of us enjoyed the "Flaming Pheasant" spectacle - and later got a lot of mileage out of the subject, telling the Survey Group members. All the rest of the trip, he was kidded about "Flaming Pheasant", but I venture it is a story he well remembers and enjoys telling.

We had time in Ankara for sightseeing, but found little of interest to report. The government was here, but so recently, there were few government buildings, memorials, or statues that honored it. However, the people are always interesting - as their dress, customs and demeanor are always different.

We were expecting to depart Ankara on Dec. 30th. However, prior to that date, we made two local flights for the Turkish officials - and interested airline personnel. They responded well to the aircraft and its equipment - and gave generous praise for the flights. Later, we saw newspaper articles devoted to the flight.

Dec. 30th - Our planned departure flight was to Damascus, Syria that would take 2 hrs. 30 minutes. When we made our take-off, we were well aware of the surrounding hills. It was no problem in good visibility, but at night and in instrument weather, climbing to a safe altitude was a must. We turned southeast - to fly over the mountains of south Turkey - noting the complete lack of trees on them. After crossing the mountains, we quickly crossed the coast and was over the Mediterranean Sea. Shortly we were over

the island of Cyprus and turning east to Beirut, Lebanon. The city is beautifully situated on the seashore, with a large open bay to the north. We continue east, with the mountains in view that mark the boundary with Syria. When we pass the mountains at 6000 ft., we can descend rapidly to the desert level where the city of Damascus is located. Approaching Damascus, we can see the desert extending far into the east, and from that direction a caravan of camels are seen approaching. It was a typical scene that probably has been happening for many many years - but was exciting to see and contemplate. We were able to see the walled city and its narrow congested streets on our approach to the landing. This was going to be a story book city to explore, as it was one of the oldest cities in the world, and a crossroad for trade routes. We were now in the middle east and a typical part of the Arabic world.

The drive into town was like going to the movies. We passed earth colored buildings, with people in the streets, along with their animals of goats, sheep, and camels. Our car competed with horse and donkey drawn carts for space - but the carts gave way to the almost constant honking of the car horn. The men we saw wore long robes and a cloth turban. The women wore long black skirts with a chador covering their face. Everyone looked serious, except the children - who wore a smile even with a dirty face.

We passed a camel market, with an arriving caravan of 30 or so camels with carpet covered cargo on their backs. Shortly, we passed through the walled city gates - and into even more congested streets. By much honking, we were able to move forward at a slow pace. Little boys chased our car, as they recognized us as tourists. Our hotel was near the city center, where we stopped to enter. Little boys crowded around and plucked at our clothing and pleaded for "bakshesh" (gift for nothing). We had no local money - so we ignored their pleas.

Our hotel was a two story building, with bedrooms on the second floor with a balcony overlooking the street. It looked out on the city scene, and crowded with people. The reception and public rooms were on the first floor, as well as the restaurant. We were told our dinner was ready - so we hurried to be on time. The meal was excellent, with shish kabob (lamb), hot veggies, and a beautiful salad. The salad looked great but we had been warned not to eat uncooked vegetables - so I avoided it, but it looked tempting. Orange juice and fruit were in great abundance - and excellent quality. Grapes were especially good - large and crisp. Dates and Turkish delight were served along with Turkish coffee - thick as mud. But, I liked it.

The next day was New Year's Eve - with no work scheduled - so we became tourists and explored the city. Just down the way from the hotel was a covered street that was the Bazaar. Little boys followed us everywhere - and seemingly just watched us. They stayed outside when we entered the shops, because the merchants knew they impeded customers. The Bazaar shops sold everything imaginable - jewelry, rugs, hassocks, dried fruit and nuts, lamp, copper and brass goods, books etc. That means most anything you can think of - and if they don't have it, they will get it for you. Bargaining for price is routine - and a good bargainer is admired. But, you can bet - they never sell without making a profit. And, why would they?

Often, the merchant would try to intercept you as you walked by - and try to induce you to enter his shop. Immediately, he would order coffee or a coca cola for

you. If you accepted, you often felt obligated to buy. Something I learned early - never pay what they ask. And, if you make an offer, start low - because he always starts high. One need not worry if you paid half price - because he will never sell unless he makes a profit. The merchant admires a good bargainer - even if they act offended or grimace a lot.

New Year's Eve was a sentimental time - with thoughts of family and how they were celebrating the event. I had no reason to stay awake for a midnight celebration - so I went to bed early. But, at midnight, fireworks and guns being shot off awakened me - so I got up to see the excitement. I went out on my balcony to see the crowd, but with real guns being fired, I decided to retreat back into my room. Now it is 1946 - the war is ended - and post-war plans are being made. One could be hopeful that it would be a "happy new year". Wilma and I certainly had much to be happy about.

New Year Day, our cockpit group went to the airport to obtain airport charts, check with the Meteorology office and the Flight Clearance office. We were well received and soon had the information we needed. By early afternoon, we were back in the city - and decided to explore the Bazaar some more. Again, we were besieged by beggar boy - and in the spirit of the holidays - gave them our spare small change. Bad move. The word spread - and the little boys crying "Bakshesh" increased.

That night, our Survey Group was invited to a High Officials dinner party. We met at 6 PM - and drinks were offered. I asked for a local drink - and Raki was suggested. I was told that one could drink it straight - or mixed with water which would turn it milky white. I chose to drink (sip) it straight to test the flavor. It was quite good, and had a licorice taste that was pleasant - but very potent. Soon, I was feeling woosy - and in need of fresh air. Fortunately, there was a window to open behind me - and I did so. But, soon a waiter came by and closed it. Immediately, I was angry - and opened the window again and frowned at the waiter. Fortunately, he left it open - I stopped drinking the Raki - and managed to get through the dinner that lasted till 10 PM. I still like Raki - but only in small quantities. It tastes good - but is powerful stuff.

January 3, 1946 - We are scheduled to leave Damascus to fly to Bagdad, Iraq. Our estimated time en-route was 2 hours 30 minutes for the 568 mile flight over the desert. After take-off, we set a course of almost due east - to fly over an undulating surface with no green vegetation. I kept looking for a camel caravan, but was not rewarded in finding one. It was very desolate country. As we neared Bagdad, we crossed the Euphrates River with a border of green vegetation. When we sighted Bagdad, we could see the Tigris River - both rivers of biblical fame. The late afternoon sun made the city look golden - and my mind went to "Ali Baba and the 40 thieves". I looked forward to this fabled city. We landed - and the Survey Group was welcomed by a Bagdad welcoming committee.

(The arrival Bagdad precipitated a personal incident that was critical of me - and entirely undeserved - in my opinion.) Here are the facts

Before leaving New York, a plan was put into effect regarding baggage handling during the trip.. Since we would not have our own baggage personnel, I volunteered

to set up a system that was to be used at all overnight stops. I would oversee that someone local would remove all baggage from the plane - and placed on the ground below the plane. Then, each passenger could be responsible to retrieve his bag and take it to customs - and to the transport to the hotel. For departures, the reverse would happen. Each individual would clear his baggage through customs - and place it under the aircraft. I would then insure that all bags were loaded onto the plane and the cargo compartment secured. Our group leader had special privileges. Due to his requirement of meeting local dignitaries - I asked the Purser to personally handle his baggage. This system had worked well on all departure and landings so far - being fairly promptly handled and no bags were lost. Everyone seemed to like the system.

At Bagdad, for some reason our Group Leader was unhappy. When I arrived the hotel (the last to arrive) - he started raising his voice to me - stating that the baggage system would have to be expedited. I was amazed - as I had been very pleased at how the system had worked at Bagdad. I was also annoyed that he would make this criticism before other members of the Survey Group. So, I checked my watch - and told him the time. I added that we had shut the engines down on the plane - just 35 minutes before - and we were now in the hotel with all baggage secure. By now, I was angry, and added, "That is the best performance that I can give you - and if you wish to replace me - then do so". I didn't wait for a reply - I just walked away. As I viewed the situation - I had a Captain status with Pan American - and the extra job I was doing was volunteered - not required. Let him do as he will. That was the last I heard of it. Hopefully, he realized three errors he made - one- the time was not excessive; two - he could have been more diplomatic; three - I was a volunteer and not required to do the job. I discussed it with Sam Miller, my Captain, but he had no suggestion and no criticism. I continued to do the job I volunteered for - and he never raised the issue again. Secretly, I think he had more respect for me. I still thought I was doing a damn fine job - and others in the Survey group agreed with me.

We had just one day - and when our operations work was done - we arranged a walk about the city. My impression was not favorable. The architecture was modest and buildings not that well constructed, the streets had debris that people had cast aside, and the people not well dressed. A strange sight, was seeing so many grown men walking hand in hand with another man. I assume they were homosexual, but not certain. One sight that did excite me was the arrival of a camel caravan into the city. I could not help but contrast that with our plane travel.

We knew the Hanging Gardens of Babylon - were located just south of Bagdad - and we were eager to see them. We tried to arrange a visit, but it was not possible for our time available, so it is a place I was never privileged to visit.

January 4th - 1946. Karachi, Pakistan was our next destination - and we had perfect weather for sightseeing along the way. From Bagdad, we flew southeast with the Tigris River in sight until we came to the Persian Gulf. The country of Kuwait was to our right, as we flew just south of the coast of Iran. We had an excellent geographic view of the Straits of Hormus, that lead into the Gulf of Oman and then into the Arabian Sea. We identified the city of Gwadar, and realized we had just passed the border of Iran and Pakistan. There were mountains close by the coast that were very scenic to see.

Passing over the city of Omara, we knew that Karachi was just ahead 150 miles. Before we could identify the city, we noticed a cluster of ships close offshore - and then the city itself became apparent, extending inland quite some distance. The airport was northwest of the city - so as we approached to land in a northerly direction, I got an excellent view of the city from my right seat. In retrospect, we had enjoyed a pleasant flight, but I was even more impressed with my appreciation of the geography along the way. I was adding considerably to my world knowledge of land masses.

The city of Karachi is typical of the desert cities - with low lying buildings made of cement and earth - so it has a tan or sometimes a golden appearance. It is modern enough to have relatively wide streets and these had fairly numerous automobiles. However, mixed with the cars, were donkey and oxen carts - so speed was well inhibited. Mostly, men were on the streets, wearing long baggy dirty white pants. The women wore a typical Muslim shawl partly covering their face, and long wide skirts. The military were well represented - and were tall, well conditioned men with a fierce countenance. I understand that they have an excellent reputation as soldiers.

Our hotel was once occupied by the high military, so it was well furnished. Our meals would be served at the hotel dining room. The hotel was only a short distance from the airport - making it convenient for our cockpit crew to visit and obtain our operations data. Otherwise, there was little scenic value to the area.

Our sightseeing was limited to a visit to the beautiful wide sandy shore. We had a great view, just to our south, of unloading ships lightering their loads to the city shore. We enjoyed a short swim, and then became interested in the sea turtles coming ashore to lay their eggs. There were many of them, but I understand that they primarily come ashore at night. This is a traditional area for the turtles to return - probably for the wide sandy beach. A man came by with a camel, offering a ride for a modest sum. This would be a first for me - so I had to do it. It was fun - and from the rocking motion - I now know why they call them "ships of the desert", but I would not like to ride one across a vast desert. I was a true tourist - and had my picture taken.

January 7, 1946 - Our two days in Karachi were productive - and we prepared to move on to Calcutta. We planned to make an en-route stop at Johdpur, on the eastern edge of the Char or Indian desert. After take-off at Karachi, we flew over a very fertile area, where the Indus River broke into a number of outlets to the sea. But, once we left the fertile area being fed by the river, we were over the Char desert where there was little growing or people living. After 2 hours, the city of Johdpur was in sight - and we landed at a military airport. We landed just for refueling, so the Survey Group waited in the terminal until we were ready to depart. Within an hour, we were ready.

Our flight was expected to take 5 hours and 10 minutes. We were past the Char desert and immediately the land appeared green and productive. A number of small rivers were evident - accounting for the farm lands. After a couple hours, the land rose to high hills of 2-3000 ft. As we neared Calcutta, a number of small towns appeared - obviously being well populated. Calcutta came into view - and we made our request for landing at a military airport known as Dum Dum. We were cleared to land, but after landing, we were informed that we were expected at Barackpore Airport - a commercial airport nearer the city. So, we made the 10 minute flight and landed at Barackpore.

We were scheduled for a two day stay at Calcutta - and I was quite excited at the prospects of seeing an exotic city. But, disillusion set in early. En-route to the hotel, we passed bodies on the street edge, that we were told would be picked up that night by authorities - and taken to the Burning Gnats on the Ganges River. Their ashes were then cast into the river - thus assuring that they would end up in Paradise. Living relatives often throw flowers into the river to commemorate a dead relative.

Our hotel was second class, but there was no better available. (To attract tourists, obviously hotels would need to be built.) We took our meals in the hotel, and the rice dishes were very good, but the beer served in quart bottles even better. The city seemed dark and dirty - and the people we saw in the streets about the same. We found little to attract us to purchase - although the brass trays and tableware were impressive. It seems that the Bazaar and the Burning Gnats were the chief tourist attractions. I saw the Burning Gnats from a distance - and that was good enough for me.

January 9th 1946 - Calcutta was the farthest east our Survey flight would go. Turning back west helped us to anticipate our arrival home. We had been gone over a month - and it would be good to be back home. This day we were planning to fly to New Delhi, India - with an en-route stop at Gaya. We departed Barackpore (with no regrets) and in 1 hr. 20 minutes were landing at Gaya. The meetings there were brief, and by the time we refueled, it was announced we could depart. New Delhi was 3 hours away - and we would fly over very productive farm lands along the way. We realized that we would fly very close to the Taj Mahal - and with a slight diversion could fly over it. Our Survey Leader concurred - and we turned to the intercept course. It was well worth the time and effort - as it stood out as a gleaming white structure that was magnificent. We could easily see it from a distance - and then circled it close at hand for a wonderful view of a unique edifice. It made our day - for everyone on board. Seeing it close at hand on the ground would be nice too.

New Delhi was an attractive city from the air, with its Red Fort, and many large white buildings and extensive gardens. We landed at a large airport in New Delhi - and almost from the initial contact encountered the officiousness of the lesser officials. Without provocation, they seemed to want to establish the fact that they are in control. At Immigrations, they took a long time to examine passports. At customs, they ignored our baggage- even though our bags had arrived at the counter - yet customs people were standing around. Finally, I went to one of them - and asked to see the Supervisor. When he asked, "Why?". I pointed out to him that our bags were present and no one was checking them. Reluctantly, he rounded up a couple inspectors - to process us slowly. He even had the gall to request a gift of cigarettes from one of our crew members. He about had a fit when I intervened and refused to allow it - saying it was contrary to regulations. He wasn't sure it was his or our regulations. Frankly, it was both.

Our drive into the city made it obvious that it was beautiful. The avenues were wide, the buildings large and imposing, extensive gardens and monuments that were very attractive. Our hotel was close to the city center - and proved to be an interesting structure, with lots of corridors in a rambling arrangement. The meals at the hotel were excellent, but we did not eat the uncooked vegetables. For dessert, they had my favorite - flan - an egg custard. I love it - and happily it seems to be served all over the world.

We were scheduled to have two days in New Delhi. Our cockpit group did our work within a half a day - and were free to arrange some sightseeing. We made a deal with a taxi - and first, we were off to see the Red Fort. It was built during the British occupation - and was constructed of a red stone - thus its obvious name. It was a fun fort to explore, but the many stories about the British kept us entranced. There was a shopping area near the fort - and I remembered that I wanted to look for a special perfume that my wife enjoyed. I found a perfume shop that made his own perfume - and when I mentioned the name "Delabahar" - he readily stated that he could make that. It would take time - so it was arranged that he would send it to the hotel. I paid him, and hoped it would arrive at the hotel. When we returned several hours later, the perfume was waiting for me. (Later, it proved to be a close match to the original - but not exact. However, it was still well appreciated.)

We met a guide at one of the memorials we were visiting. He proved to be a professor who enjoyed the work of guiding - and also the extra income. We learned many details about the Memorial Shrine - and, in addition, many details about life in India - and the value of British occupation to that life. He credits the British for much in the Indian legal system and the laws on justice. He was a fascinating talker - and I remember him well after many years. We were kindred spirits.

January 11th 1946 - We planned to go to Kabul, Afganistan - but it was decided to fly first to Karachi and overnight, then, continue to Kabul the following day. That was to prove a very fortunate decision, as information about Kabul was difficult to come by. Karachi was able to supply it - but was amazed that we wanted to go there in the winter. Our Survey Leader was adamant - he wanted to go - until we were informed that the Kabul runway had 7 feet of snow on the runway. Our plan to fly to Kabul was abandoned.

January 12th 1946 - We departed Karachi for Tehran, Iran - for a long flight of 7 hours. Our Survey Leader informed Captain Sam Miller, that he wanted to fly VFR (Visual Flight Rules) for the route - so he could see the terrain. This meant that the weather would have to be clear all the way - as there were mountains 9-14,000 feet en-route - and our charts were not that accurate. We started out well - and it was fascinating to fly low enough to check the rugged terrain. But, after 4 hours, we began to encounter clouds that got lower and lower - as we followed a valley on our route. It became obvious that we would have to climb up above the clouds - to insure being safely clear of the mountains.

We began our climb while we could orient the mountains. We had just reached the top of the clouds at 11,000 ft. - when our Survey Leader arrived the cockpit, demanding why we had not remained below the cloud, as instructed. Captain Miller explained his decision for the climb - but Survey Leader demanded that he go back down below the clouds. That could only be done safely, by turning around to where we could see down between the clouds - then descend. "Do it" - Survey Leader said - and we did. (Personally, I think the Captain should have refused.)

When we descended below the cloud again - and started flying up the valley - it became obvious that this was not a good situation. When I expressed my reservation about it - the Survey Leader said he would take my First Officer seat - and he'd fly the

aircraft. (I should have refused - unless Captain Miller requested it.) I gave up the seat, but stayed in the cockpit, until the clouds got lower still and the visibility limited. It appeared that we were in a narrowing box canyon and had serious consequences. I then informed Captain Miller that I was going to the cabin for a seat with a belt. When I entered the cabin, I must have looked worried, because the Survey passengers later told me I looked worried. And, when I went to the extreme rear of the airplane to get belted down - they began to worry.

Flight conditions worsened so much that even Survey Leader realized the futility of continuing further. Shortly, we were turning around,, to go back where we could safely climb through broken clouds to be on top at 11,000 ft. - then we resumed flight to Tehran. Captain Miller's judgement was the right one. I was so concerned with that flight up a narrowing canyon valley, with lowering clouds and visibility - I remember it vividly after 55 years. If I was subject to nightmares, that flight would qualify. Survey Leader now has two black marks in my book.

As we neared Tehran, the visibility was lowering - so we kept a lookout for a 18,934 ft. mountain north of Tehran. But, it proved to be no factor, as the city came into sight. The airport was west of the city, so we flew directly over the city, in making our approach for landing. The runways were very long due to the military aircraft sharing the airport. We were parked well away from the terminal - so we had to be bussed to it - after disembarking. Entering the terminal, was like the atmosphere of a beehive - with many people talking or shouting to one another. It took a long time to clear Immigration and Customs. Fortunately, Pan American had Iranian personnel to help us getting through airport officials - and organizing transport to the hotel. The ride to the hotel gave us a good insight to the city and its people. The avenues were wide - with statues of the Shah and some of his predecessors. The city looked prosperous and the people well dressed. The men wore mostly European suits but others wore the Arabic long robes. The women seemed to mostly wear long skirts and a shawl as a headdress. Many of the younger ones were bare headed. The Shah had urged Iran to enter the modern world - although he had opposition from the Muslim leaders.

Our hotel was Arabic traditional - yet modern and comfortable. Our dinner was excellent - and ended with cheese and fruit - as good as any I've eaten. The Persian melon was ripe and crisp - cut bite size but left on the rind. Fortunately, it was available for breakfast - and I ate my fill.

January 13th - The Survey Group did not plan much time in Tehran - and we departed the next day. We expected to reach Cairo - with an en-route stop in Bagdad for refueling - and some short meetings for the Survey Group. Leaving Tehran, we flew over fields that were irrigated and apparently where the excellent fruits and vegetables are grown. Shortly, the Zagros mountains rose before us, but shortly after, the land dropped down to desert level and we crossed the border to Iraq. Soon, we saw the oil wells working - and the gas being burned off in high towers. Landing at Bagdad went smoothly, as we were familiar with their approaches and procedures.

After transit of Bagdad, our flight would now travel 4 hours over desert direct to Cairo. The land was incredibly desolate, but occasionally we could spot a settlement of a few houses. One could hardly contemplate what life down there could be.

As we approached the Jordan border, we spotted a caravan headed for Amman. We flew south of the city but never did identify it - as it probably blended with the desert sand. Shortly, we were over the Sinai peninsula and then crossing the Suez Canal. Cairo was in sight - and we requested permission to circle the city before landing. We were able to identify the Nile River and its delta, the pyramids and the Sphinx - as well as the environs of the city. It gave the passengers a good appreciation of the orientation of the city.

As usual, our hotel was in the center of the city - and as we drove to it - the continuous street noise dominated the scene. People shouts, car horns, and loud radio made a hubbub of the atmosphere. The noise eased off at 11 PM - but commenced again at 6 AM. It made for fitful sleep, unless one is extremely tired.

Our Survey duties went well - and by afternoon we were available to go sightseeing. We arranged for a car and driver to take us to the Pyramids. They are impressive - and we wondered about all the stories about them. It is amazing that there are no real facts known about them. They do know the stone came from a quarry up north of Lebannon - but still wonder how they arrived and were erected in Egypt. The Sphinx was a surprise by being smaller than expected - but picture exaggerate when taken up close. We heard the area was prime for pickpockets - but we were careful and avoided any losses.

January 15th 1946 - To pick up a day on our schedule, it was decided to make a night take-off from Cairo - to fly to Palermo, Sicily. It was an interesting flight westward over the Mediterranean Sea - overheading Cyprus, and Crete en-route. We could see the lights of the islands, but not much detail.

Dawn was breaking as we approached Sicily - and saw the beautiful sight of Mt. Aetna. It was volcanic and smoking, but had not erupted in years. We landed at Palermo, located on the northwest coast of the island. Sicily is a beautiful island - and I'll hope some day to tour around it. We refueled, and soon we were on our way to Marseilles, France. Our route took us over mountainous Corsica to Nice, France - then along the south coast of France to Marseille. The route we had flown had seen a lot of history - and I hoped to see more of it on a visit someday.

Marseille seemed a mysterious city - or was it my imagination that suggested it from all the stories of intrigue there. It was reputed to be the source of drugs and contraband smuggled into France - and on into Europe. We did visit the waterfront - and did see some rough looking characters. Or, was my imagination working?

Our Survey Group were active in Marseille and talked excitedly about future prospects. Our Survey Leader informed us that we would make a local sightseeing flight the morning of Jan. 18th - after which we would depart for Lisbon, Portugal. The local flight went well - and the officials seemed genuinely pleased, as we flew up and back along the coast and around the city.

January 18th 1946 Our flight to Lisbon proved most enjoyable - as we had excellent sightseeing along the way. Shortly after take-off we could see the Pyrennes Mts. separating France and Spain off to our right. Then, we were over the coast to overhead Barcelona, Spain and turn westward to fly inland toward Madrid. This land is well populated - as the land is fertile. We crossed the area of Valencia, of citrus fame,

after which we crossed the border into Portugal. The land appeared to be very pleasant rolling hills, with some mix of groves and pasture. Lisbon is ahead about 150 miles, and is located on the Tagus River, a few miles up from the coast. Lisbon, Portugal will be new to me, but familiar to many New York based personnel. Lisbon was the European base for the Pan American Boeing 314 flying boat operation across the Atlantic Ocean. It landed on the Tagus River. We will land on the airport just north of the city. A large contingent of Pan American and local officials met our plane, and enjoyed a reunion of those who were known to one another.

Lisbon was essentially the end of our Survey of airports and routes that we had been investigating for six weeks. The Survey Group would stay here long enough to consolidate their findings and recommendations. We found that we would not be staying in Lisbon, but at a luxury hotel in Estoril, located about 15 miles up the coast from Lisbon. It was named the Palacio - aptly named for its excellent location, accommodations, food and service. Breakfasts were served in your room - other meals in the dining room, for which we signed a check. A party was scheduled the night of our arrival to celebrate the completion of the Survey. It was still going strong when I made my departure, but I was eager to rest, and have an early awakening to go exploring the area.

The flight engineer joined me the next morning, as we set out to see the sights. The coast was near by, where we discovered a swimming beach, cafés overlooking the ocean, and beautiful gardens and outlooks to the ocean. There was a town beach where many decorated fishing boats were pulled up and stored. They were fairly large and heavy - and I wondered how they were hauled up so far. Later, I was to see a pair of oxen used to pull while rollers were placed to roll on. Wine shops were available every block or so, and we made note of it for future use. Portugal is a very attractive country, with people friendly and happy. I related very well with what I saw. As we walked back toward our hotel, our flight engineer decided he wanted to swim at the beach we saw earlier. They had dressing facilities there, and he had brought his swim trunks. I waited for him while he swam. But, unfortunately, when he came out of the water, he was arrested. He was swimming without a top to his suit, which was contrary to the law in Portugal. (It is a Catholic country - and very conservative.) Fortunately, the police relented when it was explained that he was an American - and not aware of their law. After an apology, the police let him go with a warning.

Next door to our Hotel Palacio was the National Casino, to which our Pan American group had been given guest privileges. Some of our group decided to investigate, as we were curious about a Casino. It was a richly furnished facility, with lounges, bars, and gaming tables. Many people were in formal attire - and seemingly dedicated gamblers. We had heard stories about the extravagant sums won and lost, and I could see why it was possible. We observed for a while, then joined the gamblers. We stayed at modest limit tables - and had fun - but lost our money. Fortunately, it was an affordable amount that we could chalk up to experience. We did observe some big money being bet - often by single little old ladies. Very interesting.

January 20, 1946 - The evening of this day - we would depart for our flight home to New York. We would go via Santa Maria, a familiar stop in the Azores.

After arrival at Santa Maria, and checking with Meteorology, we found excessive headwinds for a direct flight to New York, so the Captain changed our routing to Gander Field, Newfoundland - with a forecast time of 10 hrs. 46 minutes. One hour after take-off from Santa Maria, we overheard a radio beacon at Lagens, the most northern island in the Azores group. From here on, we would rely on celestial navigation for the flight to Gander Field. It was a long, slow flight - so we were happy to finally tune in the Gander radio beacon - guiding us to the airport and a landing.

One final leg of flight and we would be home. Gander Field to New York was forecast 6 hours, but headwinds caused it to be 6 hrs. and 58 minutes. But, finally, New York's LaGuardia Airport was in sight - and we landed finishing a long flight from Lisbon, Portugal. Our total flight time was 17 hrs, and 4 minutes - with about 21 hours of duty time. It was good to be home again after an absence of 46 days.

Wilma and the two boys were in Muskegon, Michigan visiting Wilma's parents, so I called to let them know I had returned to New York. I planned to drive to Michigan to visit the Ackers - and then bring my family home. I had 18 days off from duty after the Survey trip of 46 days - so we could make the trip home a leisurely one. Wilma and I had lots to talk about after our long absence - and we both had many stories to tell. All went well on the return trip - and we were back in South Salem, N.Y. in our "Ski House". We enjoyed visiting our Pan American friends in the area, and also getting acquainted with our neighbors. My "time off" went quickly - and Pan American Scheduling called to give me an assignment for departure Feb. 9th.

1946 - PAN AM - NY DC - 4

February 9th 1946 - My first schedule after the Survey Flight in December and January - was a DC-4 flight to London - via Gander Field, Newfoundland. I was pleased at being in command again, to make my own decisions. The flight left NY in the evening, scheduled over the usual route - NY - Boston - Nova Scotia - to Gander Field, Newfoundland. It was a 1275 mile flight - and would take 5 hrs. 30 minutes. It was a cold winter night - so wing icing was a concern - but we had no problem. The flight was routine, but we found snow on the runway at Gander Field . It was light and could be ignored - and helped a smooth landing. We braved the cold to reach the terminal - then welcomed the hot drinks available. After completing my paperwork, I was reluctant to go out into the cold and crank up a cold airplane, but here goes.

Our flight forecast to Shannon, Ireland was 8 hrs depending on the accuracy of the winds. Icing was a concern - and we avoided extended flight in the clouds. Celestial sights kept us on course until reaching the Coast Guard vessel radio signal, to home in on it. When we passed overhead, we made a voice contact with their operator - just to chat. They are always pleased to talk, especially about any late breaking news or home events. It is lonely duty for them, and sometimes for us, flying at night. After leaving the Coast Guard vessel, first light began to show, and our spirits began to rise. Shortly after sunrise, the Irish coast came into view, and I started descent. I like to cross the coast at a low altitude to give the passenger a good view of the "Emerald Isle". The Shannon River is just to our right as we descend to the airport runway approach pattern - and then make our landing. The prospects of that good Irish breakfast encouraged the crew to make a prompt exit. If you are hungry - imagine- hot oatmeal, eggs and bacon, fresh Irish rolls, and big jars of strawberry jam, with mugs of coffee or tea. Well fed, we'd load up the cabs that took us to Limerick where we were scheduled to have a 24 hour layover. We stayed at a big private house converted to a commercial facility. It was run by Mrs. Hays - a strict Irish lady- that considered these men crew just her "boys" and kept them from any hijinks in her home. She was kind - but strict. And very defensive of the morals of her maids - even when they were not very cooperative with her.

The house was unheated - except for several fireplaces burning peat fuel. (Peat burning is a misnomer - as peat just smolders.) These fireplaces give little heat, so we huddled close - and with hot tea and Irish whiskey - we survived. The bedrooms were cold, but the beds were pre-warmed by a "pig" in the bed. (The "pig" was a ceramic container filled with hot water - and placed in the middle of the bed.) The "pig" and down comforters allowed us to sleep warm.

The center of Limerick was only a few blocks away, with a bridge to cross to reach it. Beside the bridge was a beautiful Catholic church, with a perfect setting beside the Shannon River. On Main Street, were shops, Inns and pubs - with people looking without much buying. They were very friendly with us - and would stop to talk at length about our being there. Mostly men frequented the pubs, and at closing time, would pull the blinds, to stay on for illegal drinks. They seemed to relish the illegal ones more than legal ones.

Post-war living conditions were difficult - as Ireland was economically a poor country. Few cars were on the streets - but often horse carts were seen. The people wore drab clothing, but good substantial cloth. In spite of it being winter, (temps. 30's - 50's) many children had no shoes, but happily ran about barefoot. The children did not beg, but were appreciative of shared cookies or candy bars.

There was dancing at a large hall on the weekends. We stopped to watch, but were soon urged to join them. Not knowing the dance, we declined. But, they pulled us into the group anyway. Their dances were strenuous. I remember a dance called "The Siege of Innes" - and I was hot and sweaty at the end. But, there was the fun of laughter and shouts as they surged to the center for the siege. The smell in the dance hall became rather gamey after a few dances. That's because daily baths are generally not practiced in Ireland - and even weekly ones are suspect.

The flight we were taking onward to London arrived from New York early morning. Our flight to London was routine, and we would overnight, then return to Shannon for a one day stay. The following day, we were en-route back to Shannon, and encountered a line of thunderstorms that looked like rough going. This was a good opportunity to use the new radar equipment that was installed, but I had never used before. When it was turned on, the thunderstorm cells could clearly be seen, and we could steer clear of them. It worked out beautifully, and we essentially traversed the line of storms without a lot of turbulence. My first experience was a unqualified success. Remembering some sobering experiences in the past, I became a big booster for radar. It would add considerably to aircraft safety and passenger comfort. Later, I had the opportunity to use it for ground mapping through clouds, and it worked very well.

The next day we made our return flight to Gander Field for refueling, and then continued onward to New York. The dispatcher contacted me upon arrival - and advised me to report to the Chief Pilot's office.

When I reported to him (Captain Chili Vaughn) I was told that I was assigned to a flight leaving Feb. 25th - to be based in Lisbon, Portugal for a period of six weeks. This was rather shocking news to me - and I asked why I was assigned - when I had just returned from a six week assignment on the Survey flight. He stated that he was aware of that - and he had tried every way possible to avoid sending me. But, he said, there were five of us going - and that he would see that I was the first to be relieved to come home - as soon as he could replace me. There seemed to be no alternative - and I left to take the bad news to my wife Wilma. With the expectation of being the first to be relieved, I hoped that my assignment would not be overly long. Wilma was a good sport about it - and we made plans for her to be alone with the two small boys for about two weeks (I thought) - in a unfamiliar neighborhood.

(Later, I learned that Captain Vaughn lied to me - as there had been other Captains available, and one even volunteered to go. So why - me? I was never to find out.)

February 25th - 1946 CAPTAIN - DC -4 LISBON, PORTUGAL ASSIGNMENT

Wilma and the two boys rode to the airport with me, when I departed for the Lisbon Assignment, since they would return home with the only car we had. It was a sad parting, since I regretted leaving them alone for so long. However, I was hopeful that the time would be short, since I was the first to be relieved at Lisbon. The flight was on a DC -4 with a check pilot in command - and four deadhead crews for the Lisbon shuttle operation. The check pilot was there to legally confirm our knowledge of landing and take-off procedures at the new airports - as required by Civil Air Regulations. Our first leg of the flight was to Gander Field, Newfoundland, then onward to Shannon, Ireland. Any Captain needing an airport check out was assigned duty in the cockpit. Since I was already qualified into Gander Field, Shannon, and Lisbon - I rode deadhead in the cabin. Our flight was routine to Shannon, where we stopped for 12 hours for crew rest. Then, with the same aircraft, our flight continued to Lisbon, Portugal. Again, we kept the aircraft, as we took 12 hours rest in Lisbon.

From Lisbon, the route was new to all the pilots. We were on a route to overhead Casablanca, then southwesterly down the African coast to Spanish Sahara, south along the coast of Mauritania to Dakar, Senegal - the western most point of Africa. It was an excellent airport used during the war by flights being ferried across from South America. All pilots were allowed to make an approach, or observe an approach to Dakar to be qualified. After refueling, we were soon en-route to Roberts Field, Liberia. It was an easy flight along the coast of Port Guinea, Guinea and Sierra Leone to Roberts Field, Liberia. Again, we made the required instrument approaches for the qualifying Captains. There was little civilization around Roberts Field except the Firestone rubber plantation and a nearby native village. The airfield had been developed as a war airfield for military flights across Africa.

We stayed 12 hours at Roberts Field for crew rest - staying in a military barracks - and taking our meals at the airport terminal. Our layover completed, we took our same aircraft back to Lisbon, over the same route we followed southbound. With four Captains route qualified - the Lisbon assignment could commence. We would be flying between Shannon, Ireland and Lisbon, Portugal - and the African portion - Lisbon to Roberts Field and return. Later, the flights started coming from New York to Lisbon with an en-route stop in Santa Maria. Then, the Lisbon pilots flew to Africa while the New York pilots got their crew rest.

The Lisbon operation went well, with the passenger flights operating without any serious delays or mechanical problems. Our layovers in Portugal were very pleasant - often getting two or three days off between flights. We became knowledgeable tourists in the area around Estoril where our hotel was located. We walked the area, and knew the shops, restaurants, casino, and wine gardens. We would rent a car - and take day trips to Sintra and explore Sintra Castle. Occasionally, we would drive further north to a walled city and sleep overnight in a castle there.

After two weeks of flight schedules, one of the Captains was assigned to return to New York. This bothered me, since I had been promised by the Chief Pilot that I would

be the first assigned to return. I said nothing, but I thought a lot. Another two weeks, and a second Captain received return orders to New York. This time, I was disturbed enough to write to the Chief Pilot reminding him of his promise to me. (The letter was never acknowledged.) After five weeks, the third Captain received return orders - so instead of being the first to return, I would be the last. I wrote a second letter to the Chief Pilot - completely outlining my complaint - and reminding him of his promise to me. (Again, the letter was never acknowledged.)

I had no alternative but to stay in Lisbon, as there were no orders to do otherwise. Unbelievably, seven weeks passed with no orders to return. There was another scheduled flight to Africa with no one but myself to fly it. I told the Station Manager that I would take the flight to Africa and back - but on my return- I planned to stay aboard the aircraft and deadhead to New York. I suggested he so notify the Chief Pilot and New York scheduling - so they could react to my decision.

I did take the flight, thus completing 8 weeks of duty. This fact, after being told the assignment was 6 weeks, and the promise of being the first to be relieved -without any word from the Chief Pilot. When I arrived Lisbon and requested if there was any word from New York, the Station Manager replied in the negative. I was incredulous - and non-plussed. I advised the Station Manager that I planned to continue to New York on that flight, and he accepted the decision. He said he could not authorize it - but would not oppose it. I did continue on that flight to New York and arrived April 21st. My wife Wilma had been notified by Scheduling and met me at the airport upon arrival. I had expected to meet with the Chief Pilot upon arrival in New York, but his office was closed. Consequently, I went home - as I was fatigued from 36 hours of duty time, Roberts Field to New York.

I expected a call from the Chief Pilot office - but it did not come. I decided to wait, and let him take the initiative - and I would respond to it. After a week, I received a call from scheduling - giving me a flight assignment in May - giving me 18 days off. It was for a flight to London and return. Upon my return, still no contact from the Chief Pilot office - and I decided to let the matter drop - unless contacted. I had copies of my letters and wires to the Chief Pilot - and they spoke of my opinion and decision to come home. I did meet the Asst. Chief Pilot by chance - and we discussed my treatment, and the letters I wrote - and he confirmed that they had been received. But, he had no explanation for the lack of response by the Chief Pilot - and expressed his sympathy. To this day, the Lisbon matter was never discussed with Chief Pilot Vaughn - which to me is incredible.

Happily, within a couple years, Captain Vaughn was replaced as Chief Pilot. Why - I'm not sure, but if I could venture a guess, it would be, "Dereliction of duty". I still remember it as a low period of my career with Pan American. Fortunately, all my relations with other Pan American officials were commendable - and I am confident my contribution and loyalty to Pan American was recognized. At least, my retirement plaque said, "For 36 years of meritorius service".

LOCKHEED L-049 CONSTELLATION

(Shown on the next page)

Statistics: (Built by Lockheed Corporation)

Length - 95 FT. - Span 123 FT. - Height 24 Ft.

Take-off Gross Weight - 98,000 lbs.

Power - 4 Wright R-3350 (2,200 H.P.)

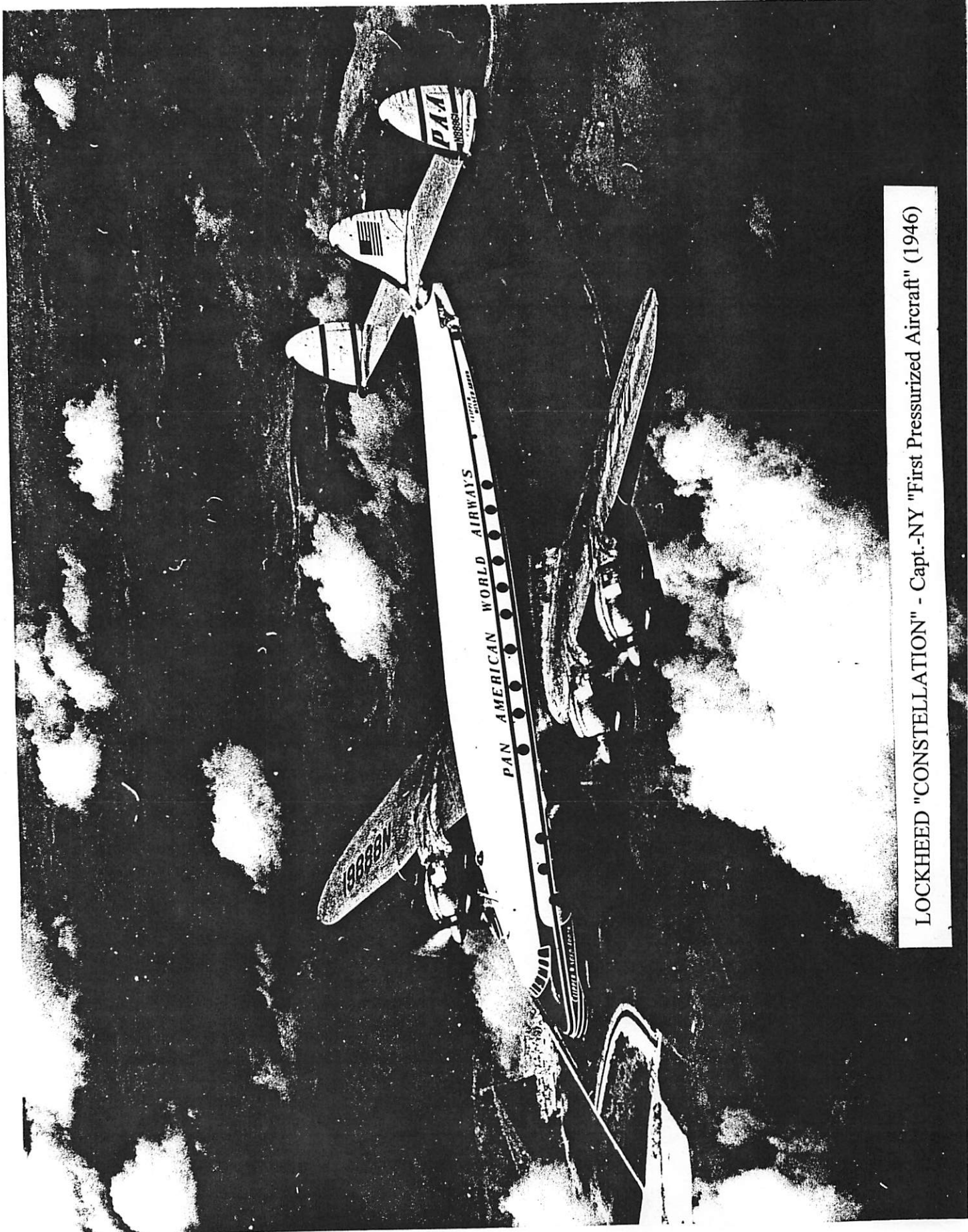
Speed - 310 MPH

Range - 3000 Statute Miles

Seats - 54

The Lockheed L 049 has been described as the "secret weapon of American transport" - as it was produced behind closed doors. It was the inspiration result of the Lockheed design staff- and the leadership of Howard Hughes. It first flew January 9, 1943. It was in a class of its own - being at least 70 mph faster than the DC -4 . It was pressurized, had more seating, and had the range to fly the North Atlantic Ocean with only one stop.

Pan American moved quickly to acquire the Lockheed Constellation - and contracted to buy them at \$750,000 each. The first arrived January 5, 1946 - and when the second arrived January 14, 1946 - Pan American inaugurated its North Atlantic Constellation service. They were to first to do so - beating TWA by more than a month. This accelerated inauguration was due to the high organizational ability by Pan American - who calls itself "The Worlds Most Experienced Airline". Pan American eventually acquired a fleet of 33 Lockheed Constellations.



LOCKHEED "CONSTELLATION" - Capt.-NY "First Pressurized Aircraft" (1946)

May 1946 - CAPTAIN - LOCKHEED CONSTELLATION

After several more flights on the DC -4 in the spring of 1946, I accepted a bid to start training on the Lockheed L -049, a.k.a. Constellation. This aircraft had been developed during the war - and had first flown in 1943. Now, in the post war era, it was ready for commercial aviation. It had four Wright R - 3350 engines, weighed 98,000 # max. take-off wt., range of 3000 miles, and was pressurized for flight at 20,000 ft. Its speed was 310 mph or 70 mph faster than the DC -4. Pan American expected delivery of 21 Constellations during 1946.

Early May, I started my ground school training, and by May 24th was ready to start flight training on the Connie. June 11th I passed my FAA certification test flight. June 17th I was scheduled for my first command flight to Bermuda - also starting my new pay scale. I flew two more Bermuda trips on the 19th and 22nd of June - enjoying the pressurization feature of the Constellation to find a more comfortable level of flight. At 20,000 ft altitude, the cabin pressure could still be controlled to 8000 ft. The handling characteristics of the Connie were excellent - in flight and on take-offs and landings.

June 25th I was scheduled to leave on a three week flight that would take me back to Africa. The initial part of the route was the familiar NY - Gander Field, Newfoundland - Shannon, Ireland, to Lisbon, Portugal. From Lisbon, we continued to Dakar, Senegal and Roberts Field, Liberia. The route now was being extended to Accra, Gold Coast, to Leopoldville, Belgian Congo, and on to Johannesburg, South Africa.

A check pilot was in command of the route qualifications for the several pilots aboard. I was observing a landing at Roberts Field, when the pilot failed to raise the nose of the plane and landed hard on the long slender nose gear. It was so hard a landing, the Captain taxied in to have it checked. Fortunately, it was O.K. But, it looks so fragile, it was always suspect for weakness. (Later, I learned that TWA landed so hard on the Connie gear, that it put a permanent set in the wings, but the gear was undamaged. After those instances, I forgot about possible frailty of the Connie gear.)

The route extension to Johannesburg covered a long distance in Africa. Roberts Field to Accra was interesting by going around the western bulge of Africa. Accra to Leopoldville was down the Africa western coast to the mouth of the Congo River, then inland to Leopoldville. The direct route, Leopoldville to Johannesburg was over extensive plains, with little or no native development that was evident. The tropical area received lots of sun heating to develop massive thunderstorms. Our layover in Johannesburg was interesting. Among the modern buildings, were huge earth piles of gold mine tailings that are visible for miles. There were gold mines near the city - and tours were available to see the operation. They were deep shaft mines that went as far as 9,000 ft down into the earth. When we arranged our tour, we went only as far as 7,000 ft and found it uncomfortably warm. The native men who work there seemed happy with their work, but I would not like it. I am told that the mine owners go to the tribal chief to select men for work, and the men compete for the privilege. The reason was that a miner

could work for 3 years, and make sufficient money to retire - buy two wives and 10 cows - and be set for life.

Our flight returned north over the same route, now having a group of route qualified Captains to fly the African schedules to Johannesburg. I arrived back in New York July 16th

July 25th, 1946 I took a requalifying flight on the DC -4 so I was now dual qualified for schedule assignments on both planes. Consequently, I had flights on either, or both aircraft, on the same trip. It was a temporary arrangement, while Pan American was getting deliveries on their new Constellation fleet.

The summer of 1946, Pan American made my temporary assignment in New York a permanent one. Consequently, we were ready to find a larger and more comfortable house. There was a rental house at Truesdale Lake, near our present house, that was two story, three bedrooms on lake front property that appealed to us. We signed a lease - and sent for our furniture that was in storage in Miami. We were well pleased with our location - as was the boys who enjoyed the waterfront.

We wanted a dog to replace the Dalmatian that ran off in New York. We found a wonderful Boxer dog that we named Hans. He was a great companion for the boys. They gave Hans a hard time with rough- house play, but Hans held his own because he was smart. Our three year old, Tom, liked to jump on Hans when he found him sleeping. On this day, as I watched, Tom prepared to run and jump on Hans, but was unaware that Hans was watching him. When Tom was in mid-air, ready to bury both knees in his back, Hans quickly moved aside - and let Tom land on the bare floor. I swear that Hans was looking at Tom, and his lips were quivering with amusement.

The summer of 1946, we were aware that Wilma was expecting our third child in February 1947 - another reason for moving to a new house. As February arrived, I managed to schedule short trips, so that I would be present for the child's arrival. February 14th, I made a Constellation trip to Bermuda and return. The next day, we had company late afternoon, and when they departed Wilma informed me it was time to go to the Mt. Kisco hospital. She was packed ready for this moment. Before midnight, Gail Barbara Evans was born for a birth date of February 15, 1947. Robb and Tom, were respectively 5 and 3 years of age - and now would have a sister. Wilma and I were very pleased with our family - and our house at Truesdale Lake, South Salem, New York was a great place for the children.

October 1947. I was scheduled for an African trip. From New York, we flew via Gander Field for refueling - then onward to Santa Maria. This ocean crossing leg required celestial fixes for navigation - so I took several three star fixes to compare with the Navigator - just to keep in practice. The Constellation had a plastic dome on top of the plane - to view the stars and to extend an octant through a hole to take a star sight. One had to use a platform to stand high enough in the dome to make the sight. Later, I learned that a navigator (on another airline) had been taking a sight when the dome ruptured. The pressurized cabin air had then blown him out of the top of the plane into

the atmosphere - and he had fallen into the sea and lost. After that incident, a web strap was installed to prevent a body from being ejected. I would guess that the domes were improved, as I never heard of another dome failure. Our flight arrived Santa Maria and Lisbon without incident.

Our African flights were twice weekly, so we had three days in Lisbon to relax and be a tourist. It became one of my favorite places in the world, for climate, interesting people, good food and fine wine. Our flight from New York arrived, and we would take it south to Dakar and Roberts Field - our next layover point. En-route between Dakar and Roberts Field, I saw a phenomena that I had never seen before. We were approaching a line of cloud that had a number of thunderstorms. Lightning usually strikes downward from the cloud toward the earth. But these, unbelievably, were streaking upward from the cloud out into the air above. This lasted for about 20 minutes - or as long as we could see. Later, I was eager to tell a meteorologist about it, and was disappointed to have him make light of it. He said it was not unusual - when strong updrafts carry negative particles of air above the cloud. That may be so - but in a career spanning 38 years of flying - I never saw it again or even heard of anyone seeing it.

On the Roberts Field layover, our crew learned of a mechanic who had set up an amateur radio station with which he communicated with the USA daily - and especially the east coast area. He offered to try to make contacts with our families on our return flight north. The communications possibility made prime conversation on our flight to Leopoldville - and made the 7 hr. 43 minute flight go quickly. Leopoldville is located on the Congo River, about 160 miles from the west coast. Across the river is Brazzaville, that can be reached by ferry boat, but I could never find an occasion to go there. Leopoldville was the Belgian name for the city while they controlled the country. Later, after the Belgians left, the name was changed to Kinshasa - and the country to Zaire. It continues to be rich in natural resources - especially for mining of gold, silver, and diamonds.

We were scheduled to turn around at Leopoldville, and return to Roberts Field. Since our flight south, the thunderstorms had built up - so we had to maneuver to avoid them on our way north. In this equatorial area, the heating builds the storms to 60,000 to 80,000 ft. so there is no way to climb over them. Fortunately, they are often isolated so they can be avoided by going around them. After passing the storm area, we had smooth flying returning to Roberts Field.

That evening was spent at the radio shack - making radio/telephone contacts with our family. Using the amateur band, a contact would be made with someone close to the New York City area - who would make a telephone call to a crew members family - reversing the charges. Once the contact was made, we could talk freely - although rather public on the speaker at our end. These first contacts were hilarious - since the family contacted could not believe it was not a hoax. It took some long explanations to convince them that it was legitimate. These calls became a regular event on the northbound flights - so we could give the families a fairly accurate arrival time home. It was much appreciated by all concerned, but especially by wives who often needed some answers to a problem that had arisen. It helped to know all was well with separated family.

During the years 1947 - 1952, my Pan American flights were primarily to Africa on the Lockheed Constellation. During those years, the routes were adjusted to try to generate more business. A Stevensville stop on the west side of Labrador was added. In the Azores, the north island of Lagens was included on our schedules to service the military base. Lisbon extended eastward to Barcelona, Spain. On the African route, the Leopoldville flight extended to Johannesburg, South Africa on a regular schedule.

In January 1951, we were expecting our fourth child - so I was not taking any extended flights. However, Scheduling called to see if I could accept a trip to Lisbon and return. Wilma thought it could be managed - and then I could be home for an extended period for the birth. So, I accepted the flight.

I arrived Lisbon without a delay and had my rest. Several of the crew were going to the movies - and I planned to join them. Just as I was leaving my room, I received a telephone call from Lisbon Pan American office - stating they had a cable from New York for me. It read, "To Robert Evans - Blue extra section arrived safely - crew and passenger O.K. for turnaround." That sounded like a Traffic message for Station Manager Evans. So I suggested they contact him - and hung up the phone, and went to the movies. Upon my return, Station Manager Evans was waiting for me - with words of congratulations - I had a new son. Then, it dawned on me - and I felt like a fool. Of course - "Blue" meant a boy - "extra section" an addition to my family - "crew" was my wife and "passenger" was her baby - and "O.K. for turnaround" meant they were both well and healthy. I was thrilled - and happy - but sorry to be away.

I bought the Station Manager a drink at the bar - and ginger ale for myself - as I was flying within 12 hours. I was eager to arrive home. When I did arrive, our new son, Scott, was already two days old. Happily, Wilma and Scott were both healthy - and eager to go home. Wilma told me the following. When she knew her time was near - the older children were left with friends in Cross River, NY - and our very good friend, Betty Helmes, agreed to drive her to the hospital. When the nurses took Wilma away - Betty went out for a cigarette. Returning 20 minutes later, Betty was informed that Wilma had already given birth to a boy. That - is close timing. Our fourth child was named Scott Richard Evans - born January 27, 1951

My Constellation flights 1947 - 1952 are remembered as enjoyable and adventurous. Pan American had furnished the airline with top industry aircraft - and I had the enviable privilege of flying them and earning top industry pay. Most of my flights were completed without unusual incident. But, a "happening" occurred that could have had serious consequences - and I remember it vividly.

It was on a night take-off from Roberts Field, when I gave the take-off to the First Officer. (Routinely, I usually shared the take-offs and landings with the First Officer - unless unusual circumstances suggested I take the responsibility.) On this night, the weather was good, but with high overcast clouds making it a very dark night. There were no lighted areas around the airport, as it was all thick jungle with no area lighting. The take-off was normal and initial climb was established, and the gear started up. As we passed over the end of the runway and into the dark of the night - I turned off the wing lights to avoid the bright glare. With nothing outside to see, reference to the instruments

reach 300 ft - with an upward rate of climb. Then, I was busy working the radio to sign off with the airport tower. Checking back on the instruments, I was momentarily puzzled to see - a rate of descent and the altimeter going down past 150 ft. Could we be descending? Alarmed - I turned on the landing lights - and found myself looking at treetops. Reacting - I pulled back on the yoke to start a positive climb upward, and were immediately out of danger and climbing normally. Only when we were comfortably climbing and passing a safe altitude, did we discuss the incident. The First Officer, who was an excellent pilot, admitted that he became fascinated by the black night and no reference lights - and ignored a close reference to his instruments. Consequently, he probably relaxed on the flight yoke - allowing the aircraft to drift lower. Obviously, he was very chagrined - and contrite. Fortunately, no accident happened, but the potential was close. And, I've conjectured, "If we had crashed - would the authorities have ever determined the real cause." Fortunately, two pilots on duty are safer than one.

Probably, most passengers have an interesting story to tell - if one only had the time to converse. Jack Conrad (pseudonym) was a young man, about 30 years of age, that I met on board the aircraft, on a Flight 150, destined for Johannesburg, South Africa. I enjoyed talking to him on board the plane, so when I found he was staying over in Lisbon, I invited him to dinner at our hotel. That gave us time to get better acquainted - and eventually told me his personal story. He said that he had been in the military until a year ago. During that year, he had studied his opportunities - and finally negotiated a contract to be the sole distributor of Pepsi-Cola in South Africa. Further, he fully expected to be a millionaire within a year. That is a heady expectation - and we talked about his plans at every opportunity - on the flight Lisbon to Johannesburg. When we separated at Johannesburg, we made plans to meet again on my next flight there.

Jack Conrad and I managed to make several contacts over the next six months - and became friends. Whenever I came to Johannesburg, we got together for dinner - or a meeting. At one of our meetings, he brought a lady friend, who was a very attractive person. She was the daughter of a local business man who owned several department stores in South Africa - with the chain still growing. Jack and his lady friend were obviously attracted to one another - and made a beautiful couple. It was a serious romance - and eventually they married.

After about a year, I met with Jack again, and had the occasion to remind him of his ambitious goal we discussed a year ago. With a smile of self satisfaction, he reported that he had made 2 million on the Pepsi-Cola franchise - and it was still expanding. I knew he had married his beautiful lady friend - daughter of the owner of the Department Store chain. Now, he reported that he was on the Board of Directors of that Department Store Corporation. He had achieved his goal - and then some. It could not have happened to a better person. Unfortunately, Jack and now a family, moved to Capetown, South Africa - so I saw little of him after the move. Later, my flight schedule changed - and we lost contact with one another. But, I always liked his success story.

During the time I was flying to South Africa, I had never seen Victoria Falls. It was about 150 miles east of our direct route to Johannesburg, so it was a bit far to deliberately divert to overhead the area. However, on this present flight, we encountered a line of thunderstorms - and I angled east to avoid them. We diverted considerably

to the east before I found a break in the line of thunderstorms. When I determined my location, it was 100 miles east and not far from Victoria Falls - and I decided to see it. There were rivers in view, leading in the direction we wanted to reach the Falls. Soon, we recognized the Zambezi River that led to the Falls - and followed it. I advised the passengers of our intentions - and that I was descending to give them a good view. They were thrilled at the prospects, and positioned themselves at windows to see the sight. Our first contact was seeing a large area of mist, marking the Falls. I maneuvered to circle the Falls in one direction - and then circled in the opposite direction so all passenger could get a good view. It was fantastic. The wide Zambezi River falls over into a deep canyon, creating this massive cloud of mist above it. We had a perfect view from our circuits of the Victoria Falls - and our passenger appreciation was evident. It proved to be a unique experience for me, as I never was to repeat the adventure. But, it remains vivid in my memory - and I was glad for the opportunity. (The diversion had no repercussions - as there was no air traffic control and a Captain was free to operate his flight as he chose.)

Thunderstorms over Africa are commonplace, but are to be avoided if at all possible - due to turbulence, hail and lightning strikes. In my career, I estimate that I have been struck by lightning at least 25 times - and most of them in Africa. Fortunately, the most severe ones are usually isolated and can be flown around in daytime. At night, the lightning will indicate its location. The worst condition is when flying in cloud, with imbedded thunderstorms, then the pilot is unaware of the thunderstorm location and get a bumpy ride and sometimes damage.

I remember a night flight, Leopoldville to Accra, when we were in cloud at 17,000 ft., with thunderstorms around lighting up the clouds. Suddenly, we were struck by a bolt of lightning just above my pilot window. The bolt penetrated the aircraft, passing just over my right shoulder and hit the radio transmitter, knocking the headphones off the radio operator. It continued through the wall, just under the Navigator's nose, while bending over his charts, continuing into the galley and discharged with a "Boom" out the ceiling antenna into the atmosphere. It happened fast - but left a lot of excitement among the crew. Fortunately, no one was hurt, but we had aircraft damage. There was a burn hole above my windshield, the radio transmitter was fused metal and not working, there was a hole in the wall between radio operator and navigator, and there was a burn hole at the galley where it discharged out. There was more damage, but we were unaware that the magnetic compass had been affected to give a 30 degree error. This caused a problem.

The compass error caused us to fly northwest over the ocean instead of a more northerly course leading us to Accra on the coast. We became aware of a problem when we could not contact them by VHF radio as we neared expected arrival time. Cloud below prevented any possible visual contact with the ground - so we did not have a location. We had to find Accra - as there was no alternate place to go. I decided to fly 20 minutes more on course, and then turn west, to descend over the ocean until we were contact below clouds. If we were over the ocean, we would turn to the east until encountering the coast - then try to find Accra.

At the 20 minute deadline, by chance we tried the frequency for the radio beacon at Cape Three Points that normally goes off the air at sunset. It was on - and indicated

a direction that placed us out over the ocean. I started descent, because I wanted to be under the clouds before arriving overhead Cape Three Points. It was an anxious period of being lost - but finally we could spot the coast visually - and confirmed our location on the coast when overhead the radio beacon. We were at Cape Three Points - located 120 miles beyond Accra. Reconstructing our probable flight path, we estimated we missed Accra by about 75 miles to the west - due to an error in the compass caused by the lightning strike.

Having a positive location at Cape Three Points, we flew eastward along the coast to arrive at Accra. Our arrival was nearly an hour late, but happy that our "lost" problem was solved. When we landed the aircraft, we noted the compass heading, compared to the runway direction - and confirmed the aircraft compass was 30 degrees in error. It had been an interesting flight - but one that I'd not like to duplicate. Next time the Cape Three Points beacon may be off at sunset - as is published. In fact, I have passed Cape Three Points many times after sunset since that that memorable night, and it has never been on.

DOUGLAS DC -6 B

(Shown on the next page)

"The Thoroughbred Airliner"

Statistics: (Built by Douglas Aircraft Company)

Length - 106 FT - Span - 118 FT - Height - 29 FT

Take-Off Gross Weight - 107,000 lbs.

Power - 4 Pratt & Whitney Double Wasp R-2800
(2500 H.P.)

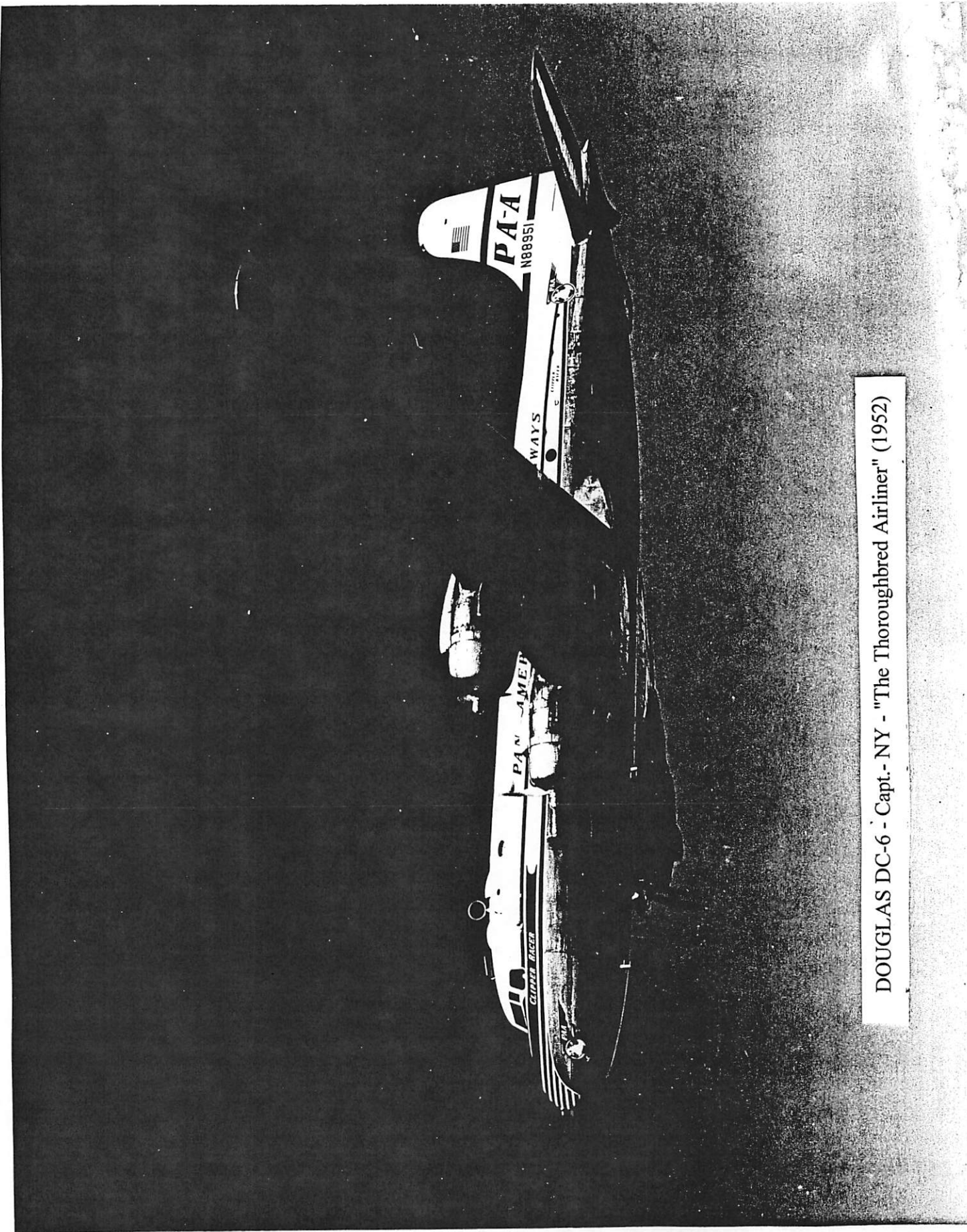
Speed - 315 MPH

Range - 3000 Statute Miles

Seats - 88

Responding to the clear superiority of the Lockheed Constellation aircraft, Douglas Aircraft Company designed the DC -6 B. The aircraft was 12 ft. longer than the DC - 4 and was pressurized. It was considered marginally more economical than its rival, the Constellation, and easier engineering-wise for inspections, maintenance, and overhaul. Pan American ordered 45 of the DC -6Bs in September 1950. All were delivered between February 1952 and June 1954. Pan American inaugurated a new all-tourist service in May 1952 with 88 seats and new low fares that was very popular. Pan American bought five of the All-Cargo version - the DC - 6A - to start a new Cargo operation. The "Thoroughbred Airliner" performed well for all the airlines.

The Douglas Aircraft Company produced 704 of the DC - 6, DC -6A, and the DC 6B type. They proved to be very reliable, and a money-maker for the airlines. However the twilight of airliners with piston engines was at hand, as the British introduced the jet engine airliner, the "Comet" in May 1952.



DOUGLAS DC-6 - Capt. - NY - "The Thoroughbred Airliner" (1952)

February 1952 - CAPTAIN - DOUGLAS DC - 6

I had been primarily flying the African route from 1946 to 1952 in DC -4's and Constellations. In 1949, Pan American had taken delivery on the Boeing Stratocruiser. It was the latest and best of commercial airliners, and Pan American used them on the popular North Atlantic route to London and Paris - and later to Rome. The senior pilots had bid them for prestige and added pay. My seniority opportunity was approaching for the Stratocruiser - but I was reconsidering. If I accepted that bid, I would be at the bottom of that seniority list for route schedules and privileges. However, if I would wait for delivery of the DC-6's, expected later in 1952, I would enjoy a high seniority for route bidding and privileges (vacation, time off, etc.) The pay scale was the same for both aircraft. I decided to wait for the DC -6's. By February 1952, the bids were out and I accepted the DC -6 bid. I was assigned ground school for a month - to learn the aircraft systems and emergency equipment and procedures.

When ground training was completed, our DC -6 aircraft had not yet been delivered. So, Pan American contracted to lease time from a cargo carrier in Los Angeles for 6 hours a day to do flight training. Four pilots, including myself, and an instructor were based in Los Angeles, until we received our DC -6 rating from the FAA Inspector. It proved to be an easy transition - as the aircraft was an honest performer and no tricks. We all had our ratings after 8 hours of flight training

When we returned to New York, two new DC -6's were waiting there. They were beautiful with the new Pan Am logo and color interiors. They were powered with the Double Wasp 2800 engine with 2500 H.P. The plane would weigh 107,000 lbs. - carry 88 passengers, and had a range of 3000 miles. Pan Am had ordered a fleet of 45 DC -6's, with the goal of attracting passengers to their newly designated "Rainbow" service - and expanding their routes worldwide. The Pacific Division (San Francisco) was extending throughout the Orient. The Atlantic Division (New York) was extending beyond Europe to the Middle East cities and on to the Orient. The Latin American Division (Miami) concentrated holding their # 1 status throughout the Caribbean, Central and South America.

The Atlantic Division (New York) where I was based, had ambitious plans for their "Rainbow Service" - by advertising lower fares, increased frequency, and improved service. The galleys would be equipped to serve hot meals - and with a bar service. Comfort and luxury at a modest price was to be a mark of Pan Am. Even the Flight Service uniform was modernized - with enthusiastic approval of the personnel. All employees of Pan Am took pride in being recognized as a world leader airline.

My first flights on the DC -6's were on the North Atlantic routes to Europe. There were added airports to the route - i.e. Goose Bay, Labrador; Keflavic, Iceland; Prestwick, Scotland. Beyond London, the added cities were Hamburg and Dusseldorf, Germany; Paris, France; and Rome, Italy. After being qualified into all the airports that the DC -6 served, I was asked by Captain Jooj Warren, Chief Check Pilot, to join the check pilot staff for the DC -6's. My duties would be to fly with other Captains to qualify into new airports - and to grade them on their 6 month check flights - as required by the FAA. I was honored to be asked, and I accepted. It would be an opportunity to receive increased

pay - but also to contribute to the DC -6 program for Pan Am. As a consequence, the remainder of 1952 was spent flying more than half my time doing check pilot duties. Since 90% of the pilots I checked were highly qualified pilots, it was generally a fairly routine endorsement of their performance. It was a good opportunity to see other pilots perform - and learn from their procedures and flight skills. One is never too old to learn.

In the fall of 1952, Wilma and I made a decision that would influence the lives of all our family, for many years to come. We bought Oven Point Camp at Long Lake, NY - located in the center of the Adirondack Mountains. It had a four bedroom Lodge, two small guest cabins, a boat house and a caretaker cabin - situated on 38 acres with 1850 ft. of waterfront on Long Lake. We had enjoyed camping for many years - now we would enjoy "high level camping" - along with the pride of ownership. We viewed the camp as my "retirement project" that we could enjoy presently - and develop for the future. We realized its commercial potential - and developed the cabins for rental. Camp was a successful venture - providing enjoyment for all the family.

Summer residency at Oven Point Camp was enjoyed by the family, but it meant a long commute for me to New York for my flights. I tried many systems - bus, train, personal plane, and personal car - to find the most practical commute. Finally, it seemed that personal car had the most advantages. For a departing flight, I would go early enough to have a rest before report time. For flight arrivals, I would start driving - and when I became sleepy - find a Rest Area to sleep for a while. That made many arrivals at Camp in the middle of the night.

While I was absent from Camp, Wilma and the children carried on with the commercial operation, and made it possible to succeed. There were problems, but I found most of them solved when I returned - and Wilma managed without complaint. Camp contributed many interesting events in our family lives - and still serves as a "special place" for our children to bring their children. Oven Point Camp has become a tradition. (More information about Oven Point Camp can be found in "Recollections of Oven Point Camp" - a family manual written by Robert C. Evans.

The DC - 6 years in 1953 and 1954 were contributing to Pan Am's development and expansion - by giving such reliable service it was called "The Thoroughbred Airliner". It's success allowed Pan Am to reduce fares - thus increasing passenger loads. Pan Am tried to influence the Federal Government to designate Pan Am as the flag carrier for the country - similar to other countries of the world. But, that effort failed. At the same time, domestic Airlines were given competitive routes with Pan Am in the overseas market (TWA - American Overseas). To compete, Pan Am requested access to the domestic markets, but that was always denied - except for designated cities that had passengers destined for overseas. Detroit, Michigan was finally designated for Pan Am - but only for passenger going or coming from overseas.

Flight operations into Detroit was very appealing to me, since my parents and siblings lived near by, and visits were now more opportune. On the initial "proving flight" for pilot qualification, I was a part of the pilot group for future flights into Detroit. The new service was being reported by the "press" and were looking for a public interest story. When they learned that I had lived in nearby Wayne, Michigan - and that my aviation career had begun at this very airport - they made it a feature story for the paper.

The paper published a favorable account of my military service and Pan Am experience, in a "Home Town Boy Success" story. My parents and siblings enjoyed the story - as well as a few high school classmates who wrote to me. The Detroit layover stop served me well for a few years - giving me many visit opportunities with my parents. Later, the route was extended to Chicago - and Detroit became a transit stop.

The mid-west of the U.S. is noted for tornadoes - and can be a real hazard to aviation. Normally, they are wide spread and easily identified, so they can be avoided. Sometimes, they are obscured by lower clouds - and can destroy an airplane in the encounter. The day I was scheduled to leave Chicago, tornadoes were reported over our route to Detroit. (The news reported that a military plane had crashed the day before in a tornado area.) So, I was a bit apprehensive about the forecast for our flight. We did see some dark, threatening areas, but could fly around them - and then we broke into the clear for our landing at Detroit. Now, we should be east of the stormy area - and in the clear - I thought.

It took an hour to transit Detroit - and when we made our take-off - there were threatening clouds ahead. I was not too concerned, but was annoyed that Air Traffic Control kept us at 7000 ft while we approached the storm area. We were flying in cloud, so that visually we could not assess the possible thunderstorm/ or possible tornado. Radar showed several cells of turbulence in the cloud mass. Rain began, then rough turbulence, with lightning all around us. I was flying the airplane manually for better control. Suddenly, we encountered heavy turbulence - and then a big jolt - and almost immediately smooth flying. The controls felt odd - and I tentatively moved the yoke to test the feel. Nothing - the controls were unresponsive to movement. I was perplexed, and fearful that the control cables may have snapped. Happily, the situation was momentary, for we got another jolt of turbulence - and the controls were flying the plane normally. After another few minutes of turbulence, we came to smoother air. Air Traffic Control cleared us to climb and shortly broke out into clear air. I turned the plane to see the cloudy area behind, and could see a massive thunderstorm area that we had just passed through. We continued climb to our cruise altitude - but called Cleveland to report the heavy turbulence area. In retrospect, being at 7000 ft - instead of higher - was fortunate, as the higher altitudes would have been even more turbulent.

While we were still listening to Cleveland ATC - we heard a Texan slow drawl voice requesting a weather report on his weather. Cleveland responded and advised that a Pan Am plane had just come through that area - and reported heavy turbulence. The Texan responded, "Thank ya - I'll just poke my nose into it and see". We waited for the drama to unfold. Sure enough, he came on the air - the drawl was gone - and the excited voice said, "Cleveland ATC - this is American 600 - this is to advise you that we have reversed course due HIGHLY severe turbulence over Cleveland." The co-pilot and I just smiled - as we had clear sailing to the east. American 600 still had his problem to solve.

(I have wondered many times about that Cleveland storm area- where the controls were soft or unresponsive. I'll never know, but my thought was that we hit the center of a low pressure area of a tornado - making the controls soft. As I said - I'll never know - but I don't want to do it again - it's too scary to contemplate. Known - is better than unknown.

Normally, the flights through Gander Field eastbound happen at night. Therefore there was little sightseeing for the passengers. On this early summer flight, we arrived Gander Field in daylight so we enjoyed seeing Newfoundland inbound for our landing. At our transit briefing, operations reported that icebergs could be seen off the Newfoundland east coast. When I made my take-off at Gander Field, I stayed at 2000 ft. so we could see the icebergs. We were well rewarded, for the bay on the coast held a number of them. I advised the passengers, so they could enjoy this unusual sight. Then, ahead of us, out to sea, were a number that were huge. We flew alongside for pictures, and excellent viewing of the deep blue of the water around the icebergs. The size was incredible, especially since 7/8ths of the bulk was under water. It was a memorable sight - and I received several notes of appreciation from the passengers.

Icebergs are spawned when the glaciers up north move toward the sea - and break off when it weakens enough to fall into the sea. Many small ones are continually breaking off, but sometimes a very large chunk will hold together and finally break in one large piece. Flying over the east coast of Greenland, one will often have the experience of seeing the glacier break, and spawn an ice field or sometimes an iceberg. It is one of the thrills of flying to unusual places.

Winter landings at Gander Field always jog my memory of two incidents that happened there. I was fortunate in both cases - but a little luck is always welcome. The first incident was when I was taxiing for a take-off. I was cleared to taxi - and entered the runway near the mid-point so I had to taxi down the runway to the take-off position. There was light snow on the runway, so I was proceeding slowly. But, when I tried to make a 180 degree turn, the icy runway kept the aircraft sliding toward the end of the runway. I knew then that we were sliding off the runway - and we could not keep going that direction. We did slide off the end, fortunately missing the lights on the end. I applied power on two engines to force a turn back. Half sliding and half rolling, we completed the 180 degree turn back toward the runway. Fortunately, we did not sink into soft ground - and applying all four engines power, we rolled/slid back onto the runway - again missing the end runway lights. Safely back onto the runway, and grateful for the reprieve, I applied take-off power, did a quick check on the magnetos, and continued take-off down the runway. When safely in the air, I called the tower and suggested that the runway be sanded in the take-off area. He acknowledged and confirmed - as he probably watched our antics at the runway end. Some days are luckier than others.

The second incident at Gander Field in winter concerned a take-off in clear weather. We had arrived at Gander Field the night before - and due to necessary maintenance - had a 12 hour layover delay. When the aircraft was ready, crew and passengers boarded for departure - and I taxied out for the take-off. It had been a very cold night - but the engines were running well. We did our run-up, checked the magnetos, and when cleared, started our take-off. The engines developed full power, the airspeed indicated normal acceleration and at V2, we became airborne. At 100-200 feet, the airspeed indicator started slowly reducing indicated speed. Fortunately, we had visual reference to the ground, so I lowered the nose to pick up speed, at the same time calling to the engineer to check engine power. Everything seemed normal except the airspeed was approaching a stall speed. while we were low on altitude. My instincts were to push

the nose down to regain speed and avoid a stall, but visual reference to the ground dictated that was not possible. Engine power was full on - so everything was done that was possible. The airspeed continued to drop - and I waited for a stall - but soon I realized we were flying normally and it must be an erroneous airspeed. Near panic gave way to reason - and I started a slow climb to gain altitude. Now, we could analyze the problem. Our conclusion was that moisture had gotten into the pitot-tube - and partially froze - to give us an erroneous reading. Within the hour, the airspeed instrument gradually returned to normal - giving credence to the theory of ice in the pitot-tube. It was written up in the Maintenance log for inspection.

In retrospect, when the airspeed dropped shortly after take-off, my instincts to lower the nose of the aircraft to regain speed, was extremely strong. Only by reference to the ground, prevented that maneuver to a dangerous degree - until we could observe that we were flying normally. If it had been a dark night, or flight on instruments, that visual reference would not have been possible. Then, descent to a dangerous level - or even into the ground - may have occurred. If such an accident had occurred, the cause would never have been determined. Pitot-tubes have frozen before, but heat normally keeps them clear - so this was a rare occurrence. I still name it a "lucky day".

When Pan Am had increased their DC - 6 fleet so they could be used on every schedule to South Africa, they were eager to improve their passenger loads by operating a superior service. Consequently, three Captains (Evans, Bassett, and Curry), were invited to visit with the Chief Pilot to discuss such a plan, and agree to bid the African route to put it into effect. He further promised cooperation with any suggestions we made for achieving our goal. We accepted, and immediately met to set up a plan. We adopted two priorities. The first was 100% "on schedule" operation - and the second - superior service to the passengers. The first, we hoped to achieve by personal example of being schedule conscious - and encouraging Station Managers to expedite "on time" transits.

The second, by raising the subject in crew briefing and asking their cooperation - with the added promise of commendations in their personal file for outstanding efforts. Our efforts became infectious, and it became a primary conversation piece. Pilots made every effort to depart and arrive on time. Station Managers supervised the transits to insure they were made "on time". Flight Service made sure all passengers were aware of "on time" arrivals - and provided with in-flight service. Everyone was going that "extra mile" because it was working - and was fun. Success was almost immediate because of all the cooperation. Sales reported that they were receiving favorable comments - and the statistics of improved passenger loads were impressive. Our record continued to grow - and for a year we achieved an enviable record. We three Captains who sparked the effort, still enjoy referring to the achievement with nostalgia. It is a good object lesson of what is possible with cooperation for a common goal. This spirit was lost when Pan Am installed a pilot base in Johannesburg, and our three Captains bid other routes.

For a period of time while I was flying the African routes, Accra, Gold Coast, was a layover base - and brings back a montage of memories. We had two or three days between flights - so we could relax. We often went to the beach to swim and sunbathe - and watch the native kids run around naked as jay birds. Body surfing was good sport. We used a mattress cover, inflated by the wind - then run and ride it on the shallow water

with a belly flop. Unfortunately, a stewardess was lost while swimming at the beach, when she was caught in a rip tide that carried her out, and was drowned.

Near the Accra base, a native we named "Trader Dan" set up his African goods to sell. He had carved wood African heads, ivory carvings, elephant tables, furs, and some jewelry of poor quality. He asked outrageous prices, and some tourists often paid it. But, the crews soon learned that bargaining was his way of life. We seldom paid more than half of his original price - and yet, it was understood he never failed to make a profit. If we would not meet his final price - he would sadly turn away and say, "You do not want it". One time when we had been bargaining - and he would not reduce his price lower, I said to him, "You do not want to sell it". His smile of appreciation was beautiful. I had learned to bargain. Incidentally, Trader Dan was reported to be a very wealthy man, reputed to have three wives and drove a Mercedes automobile.

This story started in New York, but ended in Accra, Gold Coast. It concerns a very proper old English lady who enjoyed her tea. When Flight Service offered refreshments, she chose tea. It was served to her in DeHaviland china and a silver spoon, but served with a tea bag. She was gracious, but let it be known that proper tea should not be brewed in a bag. All the way to Lisbon and on to Accra, she approved of the china cups, the silver spoon and the cookies (bisquits) - but never failed to comment about tea made from a bag.

At our landing in Accra, Gold Coast and a former British base, the passengers were taken to a transit lounge (a Quonset hut left over from the war years - with kitchen equipment from the same period). While she was there, she was served tea in a heavy white GI mug - that was black as sin - with small bits of loose tea floating in it. When she accepted the heavy mug, her response was, "Well - it's nice to be back where one can get a good cup of tea". What could one say in response? Our Flight Service just smiled.

I experienced my first earthquake in Accra. I was taking an afternoon nap and was awakened by vibrations of the bed. When I opened my eyes - I saw a big crack open in the ceiling - running to the wall. Needless to say, I left the ground floor building in a hurry. Shortly, the quaking stopped. Our crew enjoyed exchanging stories about where they were when the earthquake started.

At Accra, we took our meals at a military mess near by. One dinner time, as we were eating, a white soldier entered displaying a black mamba snake that he had caught. It is highly poisonous - but he was holding the snake behind the head as it writhed and struggled to get free. One of the black waiters approached too close - and the soldier acted as though he would throw it on him. That native nearly collapsed with fear - and turned nearly white with terror. It was a terrible thing to do - as natives are well aware of its fatal poison.

On a layover at Accra, we made arrangements to borrow a truck - as we wanted to make a trip into the "bush". We knew of a cocoa plantation about 80 miles away - and a native village close by - that sounded interesting to visit. We took a lunch - and set out on a very poor roadway. We drove through bush country that was poor and

uninteresting. It took us four hours to cover the 80 miles and arrive at the cocoa plantation. We found that the Gold Coast was the principal supplier of cocoa in the world.

The native village was interesting - as life there was very primitive. They lived in grass and mud huts open to the air - and got their water from a central well. The children crowded around us, and we gave them our spare change and candy bars left from lunch. We asked for the Chief, as it was the right protocol. But he was away, so we did not meet him. Everywhere we walked, the natives were smiling and friendly. When it was time to go, they assembled and waved us a friendly goodbye. They probably see little of foreign strangers, so they enjoy the visits when they come.

I was on a routine African flight northbound with a layover in Accra. When I reported for the northbound flight to Lisbon, the Station Manager contacted me to advise me of an unusual passenger situation. It was about a young lady who had been doing missionary work, and had contracted Black Water Fever from mosquito bites. She was being given medication every six hours to keep her placid - otherwise she became wild and unmanageable. Two nurses would accompany her - and the patient was under their care. A small private area was being set up on the plane - away from most passengers. No problems were anticipated. I concurred, and accepted the passenger and plans for transporting her to Boston, Mass.

Our flight north to Lisbon was uneventful - and our patient and nurses had no problems. At Lisbon, our schedule was to overnight for crew rest, and also the passengers continuing, would be staying in hotels. Our patient and nurses had a special plan - and would place the patient in a convent overnight and pick her up in the morning.

As the flight was preparing for departure the next morning, the patient was showing distress symptoms. I was not aware of this, as I made my preparations for the flight to Boston. However, after take-off and already en-route - the Purser came to me to report a problem. The patient was obviously disturbed - and was wandering the aisles bothering the passengers - and interfering with the in-flight passenger service. Further, the patient would not allow the nurses to come near her without screaming. When I conferred with the nurses, I learned the reason why the patient was wild. The nurses were late in picking up the patient at the convent - and she had not been given medication for 12 hours. Obviously, something had to be done - so we made a plan. The male Purser and I would entice her to the rear of the plane. When timely, we would grab her and hold her, while the nurses gave her a shot of medication.

Before setting the plan into action, I had the Flight Service explain to the passengers - to avoid any misunderstanding about the excitement about to erupt in the back of the airplane. We were ready - and soon the patient came to the rear of the airplane to talk to the Purser. I followed her - and at a nod of agreement - the Purser grabbed her arms - and I grabbed her legs - to immobilize her frantic struggles. Her screams penetrated the cabin, which we ignored, as we struggled to restrain her. The nurse promptly appeared - threw up her skirt - and plunged the needle into her leg. She screamed and struggled for another minute - then suddenly relaxed and slumped down. Then, I made a mistake - I relaxed too. She reacted - pulled her leg loose and aimed a kick at my head. It barely missed me - but did hit the plywood lavatory wall and punched a hole in it. The Purser and I regained control - and within 3 - 5 minutes she

was really relaxed with the medication in control. She allowed herself to return to her seat - and let the nurses administer to her. She was under control for the rest of the flight. At Boston, the party disembarked, and I thought I had heard the last of her.

A year later, after I had nearly forgotten the incident, I received a letter from her. She thanked me for bringing her home. She also reported that she was writing a book - and would send me a copy when it was published. I was pleased to hear of her recovery - and thanked her for writing to me. The book never arrived.

1953 - Pan Am had ordered DC 6 All Cargo aircraft - and had ambitious plans for developing international cargo flights. I was not all that interested in flying cargo, but agreed to bid the schedules, when I was asked. Pan Am wanted to get pilot input on any developing flight problems in the cargo service. The Cargo flights were operating well - with some delays due cargo loading problems. But, generally, these were improving as more experience was gained.

Then, Pan Am contracted to carry race horses from Europe to the US and to South America. Apparently, it was a very lucrative business - as big money was involved in International horse racing. The advantage was that the air flight did not upset or fatigue the horse. But, not all of them are docile creatures - especially some high bred race horses. So, problems developed that caused some concern. There were problems of getting them loaded, feeding, watering, and urine contamination. On some flights, horses panicked, and tried to climb out of their stalls. That could be catastrophic if it did escape and destroy the unprotected side of the plane. Horses can be violent.

As the incidents developed, solutions were found. Pan Am added stronger and so-called escape proof stalls, grooms brought along to deal with excited horses, sedatives to give the horse, and in the final analysis - a gun to shoot the animal if it threatened the plane safety. A horse trying to climb out of his stall at 20,000 ft over the North Atlantic is a serious consideration. Fortunately, I never had to shoot one, but I was glad to have the gun, in case I did. Another crew had a horse escape the stall - and the crew feared for the safety of the airplane, and shot it. Unfortunately, it was a very valuable animal - and the owner was very unhappy about it. The incident made the papers.

I flew cargo planes for about a year, and was happy to see that phase of my career end. Static cargo was one thing - and that business developed very well. But, flying horses is hazardous - and I wouldn't want to make a career of it.

Fall of 1954 - Bids were out for a 3 month temporary assignment for a DC -6 crew in Prestwick, Scotland. After talking it over with Wilma, we decided it could be a fun adventure - and a good education for the children. With my seniority, I had no trouble winning a bid. We chose the period of November, December and January - so the children would return to the US for the remainder of the school year. Rob (our eldest) especially had to prepare for 8th grade State Regents test in the Spring.

By this time, we were still living at Truesdale Lake, but had moved to a house on 2 1/2 acres with a tennis court. It was a renovation from a 5 car garage, to a 8 room house, with basement, 3 bedrooms, and 1 1/2 baths - and added two car garage. When we left - the house power was on for the furnace, the oil tank would be filled when needed, and a friend would check the house periodically for safety. (These facts will be important - when I need to explain them to a new Scottish friend.)

Our family went together to Scotland on a Pan Am flight - arriving at the Prestwick Airport late October. Arrangements had been made for us to live in a small residential hotel in the nearby town of Ayr. Our meals would be served there - and we soon learned that in addition to the normal breakfast, lunch, and dinner, - in Scotland we could expect mid-morning tea, afternoon tea, and tea, cheese and bisquits before bedtime. Our room was right over the hot air furnace, where one might expect overheat. Not so, as it seldom reached 65 degrees. When it did peak out for heat, the maids would open the windows for the daily "airing" while we were at breakfast - reverting to 50 degrees, by our return. As you can imagine, we wore lots of wool sweaters in Scotland. The childrens rooms were down the hall - where they were "out of supervision" by parents - and they loved it.

There were few other guests in the hotel - so this American family was closely observed. There was a general acceptance when they found we were not loud barbaric Americans. We became quite good friends with a Scottish couple, who were living there while their new house was being built. The man described it to us - being quite proud of his hot water system. The pipes ran through the fireplace - heating the water for his household needs. When he inquired about our American home - we told him about it and where it was located. He was curious about its care while we were gone. When I told him that the electric power had been left on, the furnace operated automatically with a thermostat set at 50 degrees, and oil would be replenished on a schedule - he was incredulous. (This account must have been told several times - but he still did not understand how it worked.)

This same Scottish friend was Captain of a Curling team (44# stones cast on ice - similar to shuffleboard). They were due to go to Canada and the US in February to play in some competitions. Knowing they drank "cocktails" in those countries, he wanted to know more about them. I replied that I could demonstrate them better than I could describe them - and invited him and his wife to join us for cocktail hour. He was familiar with Gin and Tonic, so we served them Martinis first - and on later visits Manhattans, Whiskey Sours and Old Fashions. He was a gracious person, and after the first visit insisted that we come to his apartment to try Scotch whiskey. He said that the Scotch whiskey was home distilled - and given to him by a farmer friend. When he served it - it was full in an 8 oz. water glass - and I protested that it was too much. But, he said, "Try it - as it is only 66 proof". When I did - it was the smoothest whiskey I've ever had - and I drank it neat. Needless to say - I did not need another - but I enjoyed more on other occasions. Anyway, our cocktail and whiskey social hours were a great success.

For a three month assignment, we'd need a car to go sightseeing. When I inquired about renting a car with my landlord - he was shocked at the thought of such expense. He said, "Oh no laddie - renting would be too dear. You can buy cheap at this time of year - and in the Spring you can sell at the same price - and the car will cost you nothing". That sounded like good advice - and I bought a gold colored Rover sedan. Since I did not need it full time, the First Officer and I agreed to share it on a weekly basis. He lived a block away -so the exchange could be made easily.

The rest of my crew were a Flight engineer and two stewardesses - also living in Ayr. One of the stewardess bid the assignment because our flights would go through Oslo, where her family lived. Our flight assignment was very attractive. Our aircraft came from New York once a week. It arrived Prestwick on Saturday at noon. Our assignment was to fly from Prestwick to Oslo, Norway(692 miles), on the Stockholm, Sweden(225 miles), and on to Helsinki, Finland (256 miles) - arriving late afternoon (but already dark due winter season). At Oslo, our routine was - a session at the sauna, dinner, and early to bed - since we had an early departure the next day. A Finland breakfast that I learned to love was - fresh fruit compote, melba toast with caviar, and black coffee. I had it every time I was in Helsinki.

Our return flight was over the same route as the day before. It was interesting seeing the geographic coastlines and the countryside - even though it was not highly unusual. Somehow, seeing it for real is more impressive than looking at maps. Of all the airports terminals, I remember Stockholm best, probably because it had crystal items that were beautiful. Oslo is remembered for our Stewardess Ellen - and her excitement at seeing her family there. Our return to Prestwick was at Sunday noon - with the New York crew returning the flight to New York. Our 24 hours of duty for the Prestwick crew completed our work for the week and we were free until next Saturday. That is an ideal working schedule.

Our family found many things to do in Ayr, and the surrounding countryside. First, we enjoyed getting acquainted locally. We arranged for our children (Robb, Tom and Gail) to attend a Scottish school - just for the experience. Part time attendance was arranged and accepted by the school - for this temporary stay. Our children reported many school interests - i.e. recognizing Scottish spoken English, learning Robert Burns poetry for a prize, doing Scottish dances, and experiencing the conservative Scottish economy.

The children became excited about castles. There were several in our area, and with our car could easily drive to them. We had an excellent guide at one of the castles who captured their attention telling about the intrigues of castles. He showed them the odd height step on the entry stairs - designed to cause an enemy to stumble and the clatter of armor alerting the guards. He talked about a Lord of the Castle inviting his enemies to the castle for a reconciliation dinner - and feeding them poison. He showed them the armory - and explained the use of long bows, cross bows, swords and daggers, plus the armor to protect them in battle. Even we adults were fascinated with the stories.

Our car allowed us to tour throughout Scotland. We made day trips to scenic areas along the coast - and saw Ayr's Rock - a small rocky island where the stone for Curling Stones come from. Drives into the hills let us see pastoral scenes with sheep and the small Scottish hairy cows. Stops at the local Inns for lunch or tea were always an experience to be enjoyed. We came to appreciate the Scottish people and their admirable qualities. They were extremely friendly to us, and were kind and helpful. They are noted for their conservative attitude on spending money. I found that they spend astutely - determining their needs, then buying quality to make it last. I accept that philosophy - and call it wise.

Our flights went well during November, and our crew worked hard to provide good service to passengers and to operate an "on schedule" airline. Somehow, a bet was started between the Scottish dispatcher and myself - regarding "on schedule" arrivals back in Prestwick on Sunday. The bet was a shilling - and our crew did all possible to see that we won. Happily, I think we only lost twice - and then by only a few minutes. The bet was fun - but it motivated everyone to be aware of schedules.

The December schedule showed that we would be flying eastbound on Christmas Eve - and return to Prestwick Christmas Day. Early December flights were going well - and we did not miss earning our "shillings". However, traditionally, passenger loads begin to drop off - with cabin loads of only about 1/3 full. That is not surprising, as few tourists are going to Scandinavia in winter - mostly business persons. I was able to generate some business for Pan Am, by informing a fur buyer about our schedules. He bought and shipped furs from Scandinavian countries and Russia.

As Christmas approached, we were informed that our flight from Stockholm to Helsinki was cancelled - due to the traditional closing of Helsinki airport for Christmas. We also learned that our flight would only have 5 passengers for the Oslo to Stockholm route. Since dinner is served on the Prestwick to Oslo leg of the flight, there is little service required on the short flight to Stockholm. Consequently, the Purser asked if I would approve of Ellen disembarking at Oslo - to be with her family for Christmas Eve, then rejoining the flight the next day to return to Prestwick. I had no objection - if she could get approval from her department supervisor in New York.

Unfortunately, New York said, "No", it could not be approved. That was too bad, as Ellen deserved a favor. (She had given Pan Am much favorable publicity as a runner-up in a world -wide beauty queen contest in South Africa for Airline Stewardesses.) But, Ellen was a good sport about the decision, and was reconciled to not being with her family - although they would be at the airport to wish her a "Happy Christmas" during our transit. All the crew felt badly for Ellen because we felt she deserved the favor. So, on the flight Christmas Eve - Prestwick to Oslo - I thought about the lost opportunity for Ellen, and had an inspiration. I called Ellen to the cockpit. When she arrived, I asked her, "Ellen, you look flushed as though you had a fever - do you feel all right"? She replied that she felt fine. But, I persisted, "Ellen, if you are coming down with an illness, I would like you to consider getting off in Oslo - so you will not infect the rest of the crew. Then, if you feel O.K. tomorrow, you can rejoin the flight to Prestwick". She started to protest that she was fine - then comprehension set in and she understood that she was going to be with her family on Christmas Eve and Christmas morning. She agreed that it might be best for the health of the crew, but said she expected to be better tomorrow for our flight to Prestwick.

I explained the "illness concern" to the Station Manager - and he concurred completely. We saw Ellen join her family, and the smiles and hugs of joy at her announcement, put all of us in the Christmas spirit. We flew on to Stockholm with our five passengers that night - and returned Christmas Day to Oslo. Ellen rejoined us, looking normal and no hint of illness - but very grateful to her crew for "a wonderful Christmas present". The spirit of Christmas was in the air - as we returned to Prestwick - where my family was waiting for me. We returned to our hotel home - where we had our

own private Christmas with the children. The memory of Ellens "Christmas in Oslo" has been remembered as a Christmas Story - and a confirmation of "Where there is a will - there is a way."

We were ready to extend our knowledge of Scotland, and chose to go north. - all the way to the north coast. Leaving Ayr, we drove east around the large bay leading to Glasgow, and then through the city, seeing the industrial and shipping areas that dominate the city. Soon, we were free of the city and continuing around the bay to the north side - into pastoral land that was a contrast to the city we had gone through. We did not expect the road to end at a river, but fortunately, there was a ferry boat to take us across. The children were delighted, especially when we were to share the boat with a small flock of sheep. Transporting animals was standard for them, because a sign listed the charge for automobiles, trucks, and various kinds of animals. After crossing, we looked for a country Inn where we could have lunch - and found it at a cross-roads a few miles up the road. It was a cool day, so their offering of hot soup just hit the spot - along with the fresh bread & butter, and marvelous cheese. We even agreed to having a pastry and tea.

Our drive continued through pastoral country - and suddenly realized we were at the foot of Loch Ness. We told the children about the Loch Ness monster, and we all looked as we drove along, but did not see it. Three quarters of the way up Loch Ness, we found a perfect Inn overlooking the lake and decided to stay. The early evening of these short winter days was near anyway. As usual, a family ran the Inn, and were very accomodating to the children. When they were asked about the Loch Ness monster, they very convincingly assured the children that the monster existed - and they produced pictures and newspaper articles to prove it. The children were fascinated - and we too, were listening with great interest. We had a wonderful meal that night - leg of lamb that we particularly enjoyed, and finished with an apple dessert with cheddar cheese. They offered tea or coffee in the Sitting Room by a nice fire, which was very pleasant. The Loch Ness stories were being told by other guests, who were convinced it exists.

After being told that the north coast of Scotland was not all that interesting, wechanged our route to northwest to the city of Ullapool. Shortly after leaving the Loch Ness region, we drove for hours through desolate moor countryside, that apparently was too poor to farm, or even graze cattle. We arrived Ullapool about lunch time, which was timely, as we were all starved. Surprise - all the shops and restaurants are all closed. When we inquired - we were told , "Because it's Wednesday". Ullapool traditionally closes down on Wednesday - and I guess everybody but we know that. There is nowhere that we can find lunch. Fortunately, we always carry snacks or candy bars in the car - and today, that will be lunch. Ullapool is a port city, with many fishing boats tied up along the waterfront. We enjoyed a walk and a drive through the area - and then decided to start the long drive back through the desolate moors area - to reach the south more attractive country. We drove until we were back at Loch Ness - and decided to stay at the same Inn as the night before where we enjoyed it so much. When we told the Innkeeper about Ullapool, he felt badly that he had not told us. But, he supplied a wonderful Tea, and we ate it to the last crumb.

We were planning an early start the next morning, but we enjoyed a full Scottish breakfast before departure. That meant cold cereal or hot oatmeal, bacon and eggs, and

kippers (salt fish) that Robb had learned to enjoy. In addition, there was a basket of hot white rolls (served everywhere in Scotland) and large bowls of strawberry jam or orange marmalade - with tea. (Milk for the children.) We went away stuffed and happy. We wanted to make a good distance that day - so we could arrive Ayr by Friday evening - ready for my flight on Saturday.

We had an enjoyable day, seeing the pastoral countryside, and particularly seeing the small wooly cows, unique to Scotland. I think they were bred to endure in the harsh winter climate. We had not covered north Scotland completely, but we had a good impression of the land and the people. We found an Inn for the night that was beautifully situated in the foothills - and only about 6 hours away from Ayr, for our next days drive.

We started early the next morning because the weather was threatening - and even occasional snow flakes falling. The Innkeeper warned us that we might find snow in the high hills that we had to cross. Sure enough - as we climbed into the hills, the snow was thicker and started sticking to the road. Finally, we came to a hill - and ahead we could see a line of stopped cars. Since I could not turn around - we continued - and joined the line of snow stalled cars. Nothing was moving - and no way to start movement. I got out to talk to other drivers - and found that this traffic stall was not unusual for this hill. One assured me that a road truck will eventually come - but one driver said he had spent the night on this hill last year. That worried me - as I had a schedule to fly the next day. We waited and waited - and used up our new supply of chocolate bars. We were warm enough, so it was a matter of patience. But, my mind was on tomorrows flight.

Finally, after 5 hours wait on the hill - a truck arrived to pull cars over the crest. It was late afternoon before our turn came - and we were pulled over the crest. From there, it was down hill where we found less snow and roads quite passable. We were moving, but at best, we had 5 hours of driving ahead of us. Finally, we were off the hill country, and into clear roads. We stopped for supper, and with improved spirits, continued our drive home to Ayr. We arrived about 10 PM - just in time for bedtime tea & cheese and salt biscuits. Needless to say, I slept well that night - and awoke ready to carry on with my flight. If I had missed the flight, I would not have relished the idea of explaining it to the Chief Pilot - after having 6 days off to prepare for it.

We realized that time was growing short on my assignment, so we planned a driving trip to London. Departing Ayr, we had a pleasant drive south, and at the end of the day arrived the city of York where we would overnite. It is an old and fascinating city, with a wall around the central part of the city. Discovering it had a walkway on top of the wall, we decided we had to walk the circuit. It gave a fascinating view of the city below - as we traversed the 1 1/2 miles circuit. Before we finished, Scott wanted a lift, so he finished on my shoulders.

We arrived London the next day -and stayed in a hotel in central London. After dinner, we went for a walk to see the night lights of Leicester Square and the theatre district that were close by. The following day, we drove to see Buckingham Palace, (where the "in residence" flag was flying, but did not see the Queen. Close by was Westminster Abbey, Parliament building with Big Ben, and the near by Thames River. Looking downstream, we could see the London Bridge which excited the younger children - and just by was the Tower of London, which excited the older boys. They liked the stories of Kings and Queens being imprisoned there - and the beheading of

ladies and gentlemen who may be out of favor with the King. (I was always intrigued with the part where the one being beheaded - would pay the axe man to do a good clean job with one stroke.) We returned to our hotel via Trafalgar Square - with the Navy hero statue of Nelson. That night we ate fish and chips - served in a newspaper. The English swear that the newsprint adds to the flavor. It may be so - as it was delicious.

It would have been great to stay longer in London, but time would not permit. We left early morning and arrived Stratford on Avon at noon. We picked an attractive pub on the Avon River to have our lunch - that displayed works of Shakespeare. After lunch, we drove north to avoid downtown Liverpool, and found a country Inn near Lancaster to overnight. The next day, we crossed the England - Scotland border at Graetna Green - and continued into the Southern Uplands of Scotland. Now, it was a short drive to Ayr and our hotel. It was a short exposure for our family to England, but we came home with lots to talk about. It had been a good history and geography lesson for all of us.

January is the birth month for Robert Burns, a Scottish poet and author. He is highly revered in Scotland, and his birthday is celebrated in Ayr with a traditional Men's Dinner - to which I was invited. The entrée was Haggis, accompanied by generous glasses of beer. (Haggis is made from strange parts of a sheep - heart, liver, and lungs - mixed with suet & onions - and boiled with oatmeal, in the stomach of the sheep.)

It was a great evening with a fun loving group of men. They revered Robert Burns and spoke of him in the familiar "Robbie" Burns - that sounded like "Robbie Bairns". In fact, all the Scottish spoken that evening - reverted to strange pronunciations - and one had to listen closely. Poems were recited, stories told, and many toasts were offered to their hero. With a fanfare the Haggis was served - and I noted many glances my way to see my reaction when I tasted it. No problem - I actually liked it. It was different - but the savory aroma and taste was rich and hardy - and I ate it with enthusiasm. Approval was immediate - and, if possible, more friendly than ever. The memory of that night is one I cherish - remembering the Scottish brogue reciting the works of Robbie Burns and transporting one back to when he lived. Reading, or hearing his poetry today - recalls that wonderful evening in Ayr when I tasted Haggis for the first and last time. But, I truly did like it.

January was rushing by - and our time in Scotland was coming to an end. We made a two day trip to Edinburgh to see if it was as beautiful as the pictures. It was, and even more so - with the defense walls, a castle high on a hill, and many churches. The streets and shops had a medieval atmosphere - with beautiful stone work to admire. We found a shop that sold "Cairngorams" - brooches unique to Scotland. They were beautiful, but our conservative finances dictated "No". But we have regretted it - as it was the perfect Scottish memento.

Another week and our Scottish adventure would end. While we were in Scotland, we had bought clothes, Toby jugs, books, wool plaid car blankets, and a crystal vase from Stockholm. We needed packing space for our return home. The hotel suggested tea boxes - that proved to be just perfect to pack them in. Before we left, the car had to be

sold. When the new crew, taking our place for the next three months, heard about it they wanted to buy it. We sold it for the same price we paid for it three months before.

Finally, on January 29th and 30th - our crew made our final trip together. I even won another shilling for an "on schedule" arrival in Prestwick. Our crew said our goodbys - and complimented one another for a "great crew" - and our assignment together. Our family were scheduled to fly home on a Constellation flight that originated in London - with a stop in Prestwick. Our family were given "first class" seating that was available - and greatly appreciated by us. The extra space, the meals and service, were enjoyed for 2/3rds of the way home. Then, a turbulent area over Newfoundland made Wilma airsick - and it lasted all the way to New York. (She remembers it in detail - and was really SICK.) She recovered on our drive home.

Home again - and when we arrived - the house was warm - and ready for our family again. My Scottish friends would have been amazed. Soon, we were back in routine. The children were back in school - with adventures to tell. Tom was assigned to write a theme on something in Scotland - and he chose castles. His teacher was fascinated, she said, when she read the opening line of his theme that read, "The castle guard was walking his post on the castle wall, when "Zing" out of the night an arrow came flying and buried itself in his neck". And he went on to relate stories he heard while visiting Scottish castles. Yes - I agree it was a good family adventure. Scheduling called to give me my next assignment - it was to Rome leaving Feb. 6th.

During February and March, I was scheduled on European flights with a nice variety of en-route stops and layover stations. I even had a schedule into Detroit and Chicago - and saw my parents. We had a new stop in Brussels, Belgium that had me recall the Survey Flight. On the return to New York, I had a stop in Keflavick, Iceland which I recall little except a runway strip when I came out of cloud at 300 ft with fog reducing the visibility to 1/2 mile. What I remember best is the duty free shop that sold booze for the cheapest price of anywhere. I made several flights into Keflavik, and on only one did I get to see its location on the tip of Iceland.

Before I went on vacation in April 1955, rumors of the delivery of DC -7's were expected shortly - and bids were expected to be out soon. That gave me something to think about - as my seniority would get me a bid. For now, I will go to my Camp in the Adirondacks, to prepare for the summer.

July 1955 - CAPTAIN DC - 7 NEW YORK

Competition on the Atlantic routes, and the Polar routes, led Pan American to find an airplane capable of long range flight with a high load factor. Consequently, it first ordered the DC - 7 B - and a year later the DC - 7 C @ a cost of \$2,250,000 each. The DC - 7 C had four Wright R - 3350 engines that allowed 143,000 lb. max. gross take-off wt., and a range of 4000 miles. It had seats for 84 passengers and a speed of 355 mph.

July 7, 1955, I started my training on the DC -7B. Five hours of flight training in two days - and I passed my rating ride with the FAA. I found the DC 7 was just a bigger, but more powerful DC -6 - so the transition training went well. July 9th, I departed on a flight to Paris and Rome with a check pilot - returning with my qualification. The over ocean non-stop capabilities between New York and Paris was a definite improvement in service for those passengers. July 17th I left New York in command for another round trip to Paris. This was a popular flight for passengers - and I was scheduled for several more over the next few months.

I learned to enjoy much that Paris had to offer a tourist - and can understand the many complimentary statements about it. The architecture is unusual and artistic - and is predominant through out central Paris. Our hotel was similar in style outside - and a rich interior with high ceilings and impressive tapestries. My room was enormous, with large furniture pieces to fill it. The bath was large, with a tub big enough for my 6 ft. length to stretch out full with extra to spare, and deep enough that one could drown. Often, I was given a room with a view toward the Eiffel Tower - which to me was impressive and a thrill to see.

Our hotel was well situated - being only two blocks away from the Seine River - where a short walk along the river brought you to Notre Dame. The artists clustered around it were always fun to watch. The Champs Elysee was in the opposite direction from the hotel - and only a short walk away. A stroll there could interest one indefinitely - window shopping, dining, or just people watching. Subway stations are near - and they could take you anywhere in the city. The subway system is the best I've ever seen - with clean tile stations, and train cars well appointed - that run often. The food is world famous, and very tasty - but very rich with sauces. Parisian people are not my favorites. Contrary to the Germans, who are complimented when you try to use their language and will help you with errors - Parisians treat you with disdain if your French is not perfect. And, I find that many Parisians are unappreciative of the war effort that saved the city.

The new DC 7 fleet allowed Pan American to expand their routes and service. It was always fun to go to new cities - and sometimes even on the inaugural flights. That resulted in publicity and reception parties which were interesting. Some of the cities added to our schedules were Dusseldorf, Hamburg, and Munich in Germany; Amsterdam in the Netherlands; Copenhagen, Denmark; Vienna, Austria; Nice, France; and Beirut. Lebanon.

The polar route to Europe from Los Angeles and San Francisco was generating lots of passenger traffic, because it cut hours off the transcontinental route. This route was flown mostly by the Pacific Division of Pan Am - but occasionally, New York based

DOUGLAS DC -7C - The "Seven Seas"

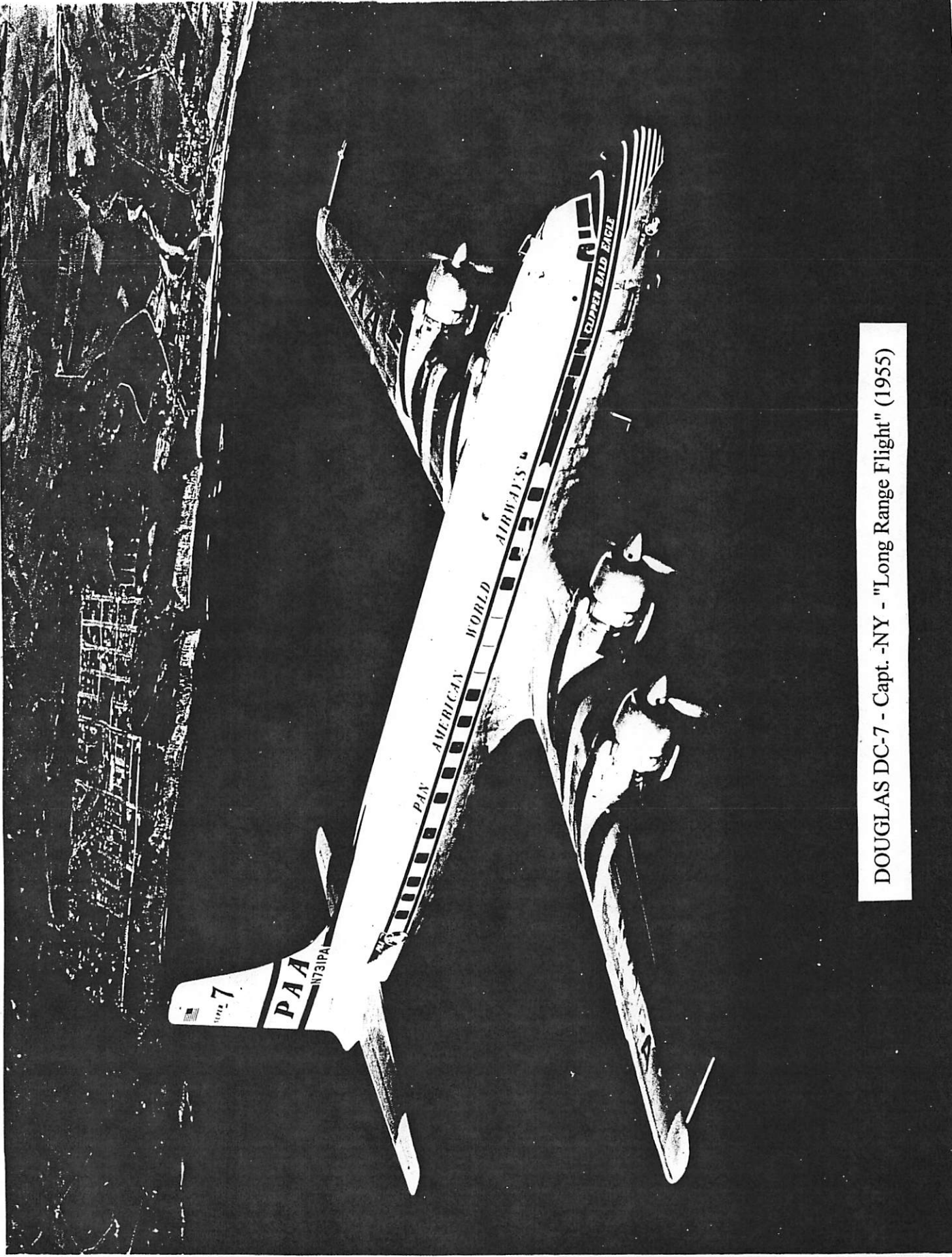
(Shown on the next page)

Statistics: (Built by Douglas Aircraft Company)

Length - 112 FT - Span - 128 - Height - 32 FT
Take-Off Gross Wt. - 143,000 lbs.
Power - 4 Wright R-3350 (3400 H.P.)
Speed - 355 MPH
Range - 4000 Statute Miles
Seats - 84

After Douglas Aircraft produced the DC -6 series of aircraft to compete with the Lockheed Constellation - Lockheed developed the L 1049 "Super Connie" for long range flights permitting Non-Stop Atlantic crossings. Douglas Aircraft responded with the development of the DC - 7B, with slightly higher gross weight, permitting either more payload or longer range. Then, Douglas developed the aircraft even further by drastic changes. The wing had an extra section added that increased the wing area by 12 percent, thus enabling weights, payloads and tankage to be increased. Now, the Douglas DC -7C could compete on the Non-Stop Ocean crossings. Further, the added wing allowed the engines to be placed five feet further from the fuselage - reducing cabin noise and vibration levels - encouraging passenger favorable reaction.

Pan American ordered 26 of the DC -7 Cs series including the cargo version, at a cost of \$2,250,000 each. They were used for the Non-Stop Trans-Ocean flights New York to London and the Polar flights from San Francisco to London. They were very successful - but unfortunately were introduced in 1956, just 2 1/2 years before Pan American moved into the jet age. They were gone from Pan American within ten years - being disposed to non-scheduled airlines, aircraft traders, and some scrapped.



DOUGLAS DC-7 - Capt. -NY - "Long Range Flight" (1955)

pilots were worked into the schedule. I did not fly the polar route often, but I remember one that was unpleasant - when my authority was challenged by a Pacific Purser.

I was the Captain of a New York based cockpit crew, who was assigned to operate a polar flight London to Seattle, Washington - and onward to San Francisco. A little bit of everything went wrong on that flight. First, over Greenland, our autopilot developed a problem - and would not control the aircraft accurately. There was no alternative, the aircraft must be hand flown - and that required constant vigilance and was fatiguing. Then, we encountered such strong headwinds that we must make an unscheduled stop in Montreal, Canada for fuel. That added to our flight duty time - but hopefully we could get the autopilot repaired. That proved impossible - as the spare parts were not available, so the plane would have to be hand flown to San Francisco. The night flight to Seattle was long and tedious - for both pilots - as we traded flight duty time. The landing at Seattle was critical for rain and low ceiling and visibility - so it an instrument approach to 300 ft. and 1 mile visibility. After a transit of Seattle, we hand flew the airplane to San Francisco, where we arrived after a long flight and duty time. We were extremely tired, but we were scheduled out in 12 hours for the return flight to London, via an en-route stop in Winnipeg. To get maximum rest, I proposed that we have a delayed awakening, and skip breakfast. Since breakfast was served on the airplane, we could be served then. The First Officer and the Flight Engineer concurred - and as a result - we all got a good nights sleep.

At flight report time, I met with the Pacific flight service for the Captains briefing, and to get acquainted with my crew. At that time, I advised the Purser that the cockpit crew had skipped breakfast due to minimum rest time, and we'd appreciate breakfast shortly after take-off. The Purser responded by saying that the cockpit crew is normally fed after transiting Winnipeg. I explained about our inbound flight, and having minimum rest time, and not having eaten in 14 hours - and consequently would appreciate an early breakfast. I noted the resentment, but was not unduly concerned.

The take-off and departure was normal, but due to the unfamiliarity, we became preoccupied with the departure procedure and the route. We had leveled off at cruise altitude - and expected breakfast to be served shortly. When an hour had passed, and no service was offered, I rang for flight service - and the galley girl appeared. When I inquired about breakfast - she replied that she was serving passengers and that the Purser had told her to serve the cockpit after transiting Winnipeg.

I was momentarily stunned, as I had never experienced such a challenge to direct instructions. I quietly told the galley girl, "Miss, I am the Captain of this flight - and you are now ordered to stop serving passengers - until all the cockpit crew are served. Are there any questions"? "And, by the way, find the Purser and tell her to immediately report to the cockpit". She replied with a, "Yes Sir" - and quietly departed. As soon as she left - I left my seat and put on my uniform jacket with the four stripes - and waited for the Purser. She soon entered and was obviously disturbed. Without delay, I asked her if she had instructed the galley girl not to serve the cockpit until after Winnipeg. The Purser replied, "Yes - and that is when we always serve the cockpit crew".

My response was, "Do you see the four stripes on my sleeve"? "That means I am the Captain on this flight. I gave you an order - that you chose to ignore. Now, I have instructed the galley girl to stop passenger service - until the cockpit has been served. You will see that this order has been carried out. Is this understood"? "Further, when

we arrive Winnipeg, I want you to report to the Station Manager at his office - and this matter will be discussed again."

When I sat down again in the cockpit - the First Officer and the Engineer were grinning - obviously having enjoyed the show. Soon, the door opened - and breakfast was served to them - and I would eat after. Later, I confirmed that all passengers had been fed with no problem - as I expected. As the flight neared Winnipeg, I contacted Pan Am by radio - asking the Station Manager to meet the airplane. Upon landing, I found the Station Manager waiting and curious about the meeting request.

I gave him a brief summary - and ask to use his office for a meeting with the Purser. When she showed, she appeared a bit more subdued. I informed her that the Station Manager was there as a witness - and reviewed the events leading to her refusal to follow my order - essentially a challenge to my authority on the flight. Her only response was that it was not normal procedure. I reviewed again why the request was made - to insure maximum rest for a crew that had a difficult flight from London - and still make a scheduled departure at San Francisco. Serving three extra meals was not an unreasonable request. But, I stated, "My prime complaint was the challenge to my authority when she refused to follow her Captains order - and unless I could expect future compliance - I would not accept her as crew on the flight to London". I added, "The Station Manager will arrange for your return to San Francisco, where you can make a report to your department head. What is your decision?"

The Purser must have realized that she was in potential trouble - and readily agreed to follow any reasonable orders from her Captain. That settled - I thanked the Station Manager for his participation - and requested that we make every effort for a scheduled departure.

On the flight to London, I had a very contrite Purser - and service to the cockpit was outstandingly good. So good, I took the opportunity to sincerely compliment her. It also led me to reconsider the insubordination problem - as a possible misunderstanding. I offered her a choice - "This breakfast incident can be forgotten - as a lesson learned - or we can report it to our department heads for disposition". It would be her choice. She chose that - the matter be forgotten - and offered an apology, saying it would never happen again. I accepted her apology - and believed it.

Crew problems were seldom a factor with me - since I tried to anticipate them in my crew briefings. But, they do arise occasionally - and it's a Captains responsibility to deal with them.

As long as the subject of crew discipline arises - I'll relate a couple more.

Being "on time" is a must for crew members of an airline - since they operate on a schedule. Delays only complicate the operation - and there are few excuses for a paid crew member to be late for his job. Isabella, a stewardess, was of Spanish origin, and was probably used to "manana" habits - as she was always late. This time she paid a price. She was on a trip with me to Africa, with a layover at Roberts Field - then return to Lisbon. When we reported for our return flight - Isabella was not present. Upon inquiry, it was learned that she had a date with a local Firestone engineer. Contrary to my usual decision, I delayed the flight - hoping she would show. At a :45 minute delay, I

announced we would depart - with the Station Managers assurance he would look after her - until the next Pan Am flight.

As we made our take-off, I saw a car racing toward the airport - and I guessed it was Isabella. But, we were already on our way, and returning was no option. Later, the Station Manager reported that she saw the plane take-off - and when he confirmed that she was left behind - used curse words that would have sent me to hell. She deadheaded on the next flight out - three days later. Happily, I never saw her again - and I heard she left Pan Am - voluntarily or involuntarily, I never heard.

Another "on time" incident occurred in Paris - in spite of my crew briefing that the crew bus would roll 10 minutes after scheduled pick up time. If they missed the bus, the only alternative would be a taxi-cab.

The crew was assembled at the bus well before scheduled departure time, but Sarah was not present. She was notorious for being late, and usually boarded at the last minute. This time, even her baggage had not arrived at the bus. We made the count down - and at 10 minutes after schedule - I signaled the driver to go and we proceeded to the airport. Sarah arrived by cab about 30 minutes later - in time to make her flight but out \$30 for the cab fare. She reported that she had gone back to sleep - after receiving her wake up call. The result was - a \$30 loss and another stewardess to do her flight preparations work. I'd guess she needed her mother for the second wake-up.

Perhaps, a Public Address system is not the best way to communicate with airline passengers, but it was the best we had on board for a full aircraft. Consequently, I tried to make my announcements to the passengers short - and meaningful. The routine ones were - welcome aboard, expected flight time, and arrival time at our destination. En-route, I restricted my announcements to unusual events that would normally interest them. Examples were - unusual sunrises or sunsets, displays of northern lights, sightings of land masses such as the southern tip of Greenland, famous mountains such as Mt. Arrat or Mt. Everest, islands like Bermuda or Crete - anything of general interest or education for the passengers. Usually, these are appreciated and well received. But, sometimes they are not wanted or ignored.

An example of the latter, was the time I was flying at night under a full moon and about to cross the east coast of Greenland. Ahead of us were ice mountains as high as 10-12,000 ft. high - and under the full moon were an absolutely beautiful and memorable sight. It was so inspiring, I felt the passengers should see it. So, in spite of some sleeping passengers, I brought the scene to their attention - short but to the point. Flight Service reported that many did respond and looked out the windows. The next morning, as I strolled and talked to the passengers, I was complimented by many for the scenic opportunity. But, I had one lady complain. She said that she heard many passengers talking about the fabulous view over Greenland, and asked, "Why didn't you tell us about it"? I couldn't believe I heard correctly, and said, "But, lady, I did. I made an announcement on the Public Address system". And then she responded, "Oh, the Public Address - whoever listens to that". What could I say - so I just smiled. To myself - I thought it poetic justice - next time listen to the announcements. After all this time, I learn that people are not hanging on to my every word. Very deflating.

Many flight passengers are very relaxed about flying, but there are the exceptions. On a flight, Boston to Lisbon, I was walking through the cabin to greet passengers - and to answer any questions that they might have. It was my usual practice, if flight conditions permit, because passengers like to meet their pilot as a personality. I came to a Portuguese man, who spoke broken English, and seemed nervous about flying. When I moved on, he followed me to the back of the plane. When I turned to meet him, he had a pleading look - and pressed something into my hand. I glanced down to see it was a \$50 bill. When I looked up at him - he said, "Please, please - guarantee that we will land safely". I could see that he was very disturbed - and probably terrified of flying. I returned his gift - and then sat down to chat. He was on an emergency trip to see his ailing mother in Lisbon - and had never flown before and was very scared. I asked him if he had a family - and replied he had three children. I then showed him pictures of my family - and told him how many years I had been flying. I used a few of the words of Portuguese I knew, and he seemed more relaxed. I assured him that I had every intention of landing safely for myself and for my family. And, I continued, if I was safe - then he would be safe too. He liked that - and smiled beautifully.

Flight safety is something most people are concerned about, but are not very knowledgeable about it. If asked, most people would say that the landings are the most dangerous part of a flight. That is not so, as it is the take-off, when the flight is most vulnerable. But, actually, airline flight is designed to be 100% safe - with regulations to go far to make it so. Consider - and see if you agree.

On a take-off, the plane is at its maximum gross weight - with passengers, cargo, and fuel. It must start from zero airspeed and accelerate to flying speed using the available runway. The engines are at maximum power - and most vulnerable for failure. So, take-offs are the most critical part of a flight. Once that is achieved, one can relax. But, take-offs are regulated by the FAA - so they too are 100% safe for performance. Consider - each runway has a maximum gross weight for any particular aircraft. It was set by a demonstration test to achieve the following. The aircraft must be able to accelerate by using all four engines - to a point where an engine failure may occur - then the pilot may choose to retard the power - put on his brakes and stay on the remaining runway. Or, the pilot may choose, if he has reached take-off speed - to continue flight on three engines and climb to clear an obstacle 35 ft. in height at the end of the runway. Once in the air, with the gear up and wing flaps retracted, flight can easily be maintained to effect a normal landing. With the reliability of modern engines, flying can be considered very safe. Other factors can affect flight safety (weather, ice, traffic control etc.) but these are generally controllable factors - and shouldn't affect safety. Statistics well support the safety of flying.

Then, there are passengers so unconcerned about safety or possible delays en-route - it reminds me of a passenger who asked, shortly after take-off from New Delhi, India, "Skipper - what time do you expect to arrive New York"? (We are nearly half way around the world with five take-offs and landing en-route). Not knowing a clever answer to give him, I replied, "Well - we took off on schedule at New Delhi - I don't see why you should not arrive New York on schedule at 5 PM Saturday. That seemed to please him immensely.

By 1957, Pan Am had a very liberal travel policy for employees with 10 or more years service. Our family could travel free - so we chose to go to Puerto Rico for the children's spring vacation from school.

We flew from New York direct to Puerto Rico landing at the San Juan airport. We flew right over the harbor, reminding me of the past flying boat operation into San Juan. Leaving the airport, I could show the family the harbor where I used to land. The children looked at me rather incredulous at such an idea. We stayed at the Condado Hotel (same as before) that was beautifully situated on the north shore. It was close to shopping areas and to the fort guarding the harbor entrance. We planned to spend two days at the hotel to enjoy the beach, the pool, outdoor dining room and exploring the nearby sights.

After our two days, we rented a car to start a five day circuit tour of the island - choosing to go counter clockwise. The road was away from the shore, but high enough to see wonderful outlooks to the sea. When we found a road leading to the shore, and to a beautiful beach - we decided on a swim. The children enjoyed the surf - even though it beat them up a bit. We continued on to the western end of the island, and found a small village where we had our lunch. Afterward, we drove the road lead south with beautiful outlooks to the sea - and finally to Ponce. We had a reservation at a family Inn on the south shore - and it proved to be delightful. We spent three days enjoying the scenery, boat trips and relaxing at the pool. Best of all, were the boat excursions to small off shore islands, where we swam and picnicked on the lunch they sent along for us. We had snorkel equipment - and all of us enjoyed seeing the colored fish and the spiny sea urchins so visible in the clear water. We had the island to ourselves because the boat left us - to return at the end of the day. On the boat trip home, we enjoyed a fabulous sunset. One night the boat took us to Phosphorescent Bay to see an amazing sight. The boatman would stir the water with a paddle - and the water area would light up very bright. The children could not stop stirring - and marveling. As the boat drove away, we could see a lighted wake - and then faded.

Reluctantly, we left Ponce, to travel east and passing small villages along the way. Our destination was the Rain Forest - located on the eastern end of the island but high up on the hills. When we came to it, the change in vegetation was amazing - all due to the predominance of rain in that area. En-route back to San Juan along the north coast, our road led to a cable ferry that took us across a small river, to join the road on the other side. Ferry boats are always fun. One more night at the Condado Hotel - then an early morning departure to fly back to New York. We all agreed it as a great vacation.

Our San Juan trip had worked so well, we wanted to go overseas - and settled on "Christmas in Rome" for our choice. The children were off from school for Christmas, and I bid to be free from my flight schedule. It was proposed to the children by giving them a choice - stay home and have presents, or no presents and fly to Rome for Christmas. Scott, being the youngest, thought twice about no presents, but finally made it unanimous.

En-route to Rome was a stop in Paris, and we planned to stay two days. I picked the Palacio Hotel where the crew stayed, so we could ride the crew bus, and because it was well located. We walked to most of the sights, such as Eiffel Tower, Seine River,

Notre Dame, and the Louvre to see the masterpiece paintings. We rode the subway to St. Sophia to see the cathedral - and to enjoy the view of Paris from the hilltop.

One night, we arranged for Gail to baby sit Scott at the Hotel - while Wilma and I took the older boys to the Follies Bergere. Risque - but not burlesque. They liked it.

Breakfast at the hotel was always served in the room - and the children liked that - especially the hot chocolate and the fresh croissants. Other meals were had outside the hotel - introducing them to onion soup and fresh French bread, ending with Brie cheese. Very good. Due to cold weather, we all bought Tam hats, to be in style.

The to days went quickly - and time to fly to Rome. En-route, we flew by the city of Geneva, with the high fountain in the center of the city - then over the Alps where I pointed out Mt. Blanc (15771') and the Matterhorn (14865'). The sight was fantastic- and thrilled us all. In Rome, we stayed in a high rise Pension - on the 7th floor - in mid-town Rome near the train station. The Pension furnished us rooms and breakfast for very moderate prices. We could walk to many sights - i.e. Trevi fountain, Spanish stairs. By bus, we visited St. Peter cathedral, and found we could climb inside the dome to a balcony over looking the city. We visited the Colosseum - and hired a guide, so the children could hear the tales of events that took place there. To hear about fights with gladiators, chariot races, lion fights, and even naval battles made fascinating listening.

We spent several days exploring Rome - and celebrated Christmas Eve there. We had said no presents, but delighted Scott when we relented and brought out a gift for each of them. Early Christmas Day, we left Rome by rented car to drive south - enjoying the scenic countryside. When we came to Mt. Vesuvius, we drove to a parking area, and then walked to the summit to look down into the crater. This was something new, and the children were impressed. Later, we visited Pompeii, and saw where the lava and the gases killed the inhabitants almost instantly when the crater blew.

We drove around Naples bay to the town of Amalfi on the south side. It was late now on Christmas Day - and nearly night when we found a hotel. The hotel offered to fix a supper for us, but we were interested in a traditional Christmas dinner. So, we went looking in town for a restaurant - and was chagrined to find them closed for the holiday. Finally, we spotted a lighted "Restaurante" sign - and looked forward to our Christmas dinner. It proved to be a seafood restaurant - and the proprietor spoke very little English. We search the menu - and finally settled on spaghetti and something. That something turned out to be Squid. We were hungry - and we ate it - along with delicious spaghetti, fresh Italian bread with fresh butter, cheese and wine. We finished with delicious ice cream and cookies & Espresso coffee. Not bad - even for Christmas (The children still remember Christmas in Rome - and especially their Christmas dinner of Squid).

The next day - we drove south on the Amalfi Drive - on a road that hugs the mountainside high above the sea. It is world famous for engineering, the outlook to the sea, and its twists and turns. I would have liked to continue - but we had to turn around and head for Rome. We enjoyed the drive back to Rome, but it was late when we arrived. We stayed overnight - then early the next morning returned to the airport and our Pan Am flight home. Italy is a favorite country of mine to visit - for food, drink, scenery and friendly people. We all enjoyed our "Christmas in Rome" - with the Paris stop, Rome scenery, and Squid for Christmas dinner. Pan Am made it all possible with their employee travel policy - which is great for family members.

The DC -7 era was very satisfying to me for the years that I flew them. Being senior among the pilots flying the 7's, entitled me to route bid privileges, pay, and vacation choice. The expansion of routes and cities for the extended range ability of the DC 7 allowed me to enjoy the pleasure of being part of that program. Now, the Jets are coming .Late 1955, Pan Am had ordered 25 DC 8's and 20 Boeing 707's to compete with the British Comet that had been flown successfully. Unfortunately, the Comet had structural problems to lose their lead. Now, the American Jets are ready to compete. The more senior pilots are ahead of my flight participation, but my bid date is drawing close.

"THE U.S. AIRLINES JET AGE BEGINS"

BOEING 707 JET

(Shown on the next page)

Statistics: (Built by Boeing Aircraft Company)

Version - 707 - 321C

Length - 153 FT - Span - 146 FT - Height 42 FT

Take-Off Gross Weight - 336,000 lbs.

Power - 4 Pratt & Whitney JT3D - (18,000 lb. Thrust)

Speed - 600 MPH

Range - 4000 Statute Miles

Seats - 135

Pan American dominated the international arena during the 1960s with the introduction of the Boeing 707. In October 1955 Pan American ordered 45 of the new jet airliners. Each had double the capacity of all but the largest piston-engine aircraft, twice as fast, and the range to fly nonstop across the Atlantic Ocean. Economically, this was the potential of four or five times the productivity of the DC7C. Further, the reliability of the jet engine held prospects for greater annual utilization.

The first B-707s, delivered Nov 30, 1958, were the 707-120 version - with the JT3C-6 engine - with 13,500 lb. thrust - resulting in 120 ton gross weight and range of 3000 S.M. Pan American received a fleet of eight of this version. Boeing improved the 707 with the 300 series - that had the Pratt & Whitney JT4A- 9 (Ole Smoky engine). Later, Boeing installed the JT3D-3 turbofan engine - giving greatly improved thrust rating. This resulted in shorter take-offs, greater range and capacity - and potential for increased profitability. Pan American finally took delivery of 137 of the Boeing 707 all series aircraft - that proved highly profitable for the airline.



BOEING 707 - Capt. - NY "First U.S. Jet Airliner". (1959)

October 1959 - CAPTAIN - BOEING 707

"THE JETS ARE COMING"

The Boeing 707 jet aircraft had been developing for several years. It was a commercial version of a military craft - so the airframe and engines were well proven for reliability. The first 707 - 100 series was delivered in August 1958. They had the JT3C-6 engines that had a thrust rating of 13,500 # - and were slow to accelerate. The aircraft had an instability factor - identified as "Dutch Roll" - that was disconcerting but easily corrected by applying opposite aileron and rudder. However, some pilots had trouble with these factors on the "Jets" - and failed to qualify for a rating. Consequently, the 100 series of the B-707 got a bad reputation - among pilots waiting to qualify. For a while, 1 in 10 were failing. Later, the B707-321 was delivered and had JT3D engines with 18,000 # thrust - and the Dutch Roll instability engineered out. The B-707's were a great success in every way - speed, comfort, and reliability. Pan Am enjoyed such public acceptance, it was rumored that they paid for the first B-707 fleet order in one year. Pan Am went on to order 136 B-707 aircraft that brought them outstanding success of operation during the 1960's.

I was eager to fly the 'jets' - and in October 1959 accepted a bid to start training. I was assigned to a month of ground school in New York - where the class was taught all the new operating systems, and the safety procedure for the B-707. It was the most comprehensive study of a new aircraft that I had ever had - but Pan Am was eager to avoid any "foul-ups" for this new jet service. We were required to pass a written exam at the end of the ground school - confirming our understanding.

In November 1959, I was sent to Miami to start flight training on the 707-100 series aircraft. Having heard the stories about the slow acceleration of the engines and the "Dutch Roll" in flight - I was a bit apprehensive about the training. But, the factors were minimal in my experience, and had been exaggerated. The slow acceleration was easily overcome by early anticipation - and the "Dutch Roll" was easily corrected if it occurred. I had 13 hours training in 7 days - and then took my FAA rating ride successfully. Those are always proud moments - and I was happy to be a jet pilot.

One of the new safety procedures on the jets was the simulation of decompression at high altitude (above 30,000 ft.). With a plane load of passengers - a window blowing out (or any other factor) -dictated an emergency descent to 10,000 ft for life sustaining oxygen. So, we would practice the emergency - at "Go" - we'd don our oxygen masks, retard the throttles, and nose over in a steep descent (8-10,000 ft per minute) until reaching 10,000 ft. (That reminded me of my fighter pilot days in a P - 36.)

Four days after receiving my FAA 707 aircraft rating, I was assigned a flight to London - that was the fastest I'd ever experienced - 6 hrs. and 4 minutes (compared to a normal DC 7 flight of 10 - 10 1/2 hours). And, we were transporting 143 passengers on the jet vs. 84 on the DC 7. One could readily see that the jets were a giant step up in commercial aviation. Pan Am would eventually order 136 Boeing 707's (including the 121 & the 321 series aircraft) to eventually replace their entire propeller fleet. Returning from the London flight, I had two days off - and scheduled out again. They needed me.

Once qualified on the B -707, I was flying full time, with minimum time off between flights. During December, I made three flights into Europe, and a day flight from New York to Nassau, Bahamas and return. By this time, my confidence in the aircraft was positive. The slow engine acceleration was acceptable, by planning ahead. The dreaded "Dutch Roll" was almost a forgotten issue. I did have the condition start on a flight, but easily stopped it by opposite rudder. It was no big deal. My flight log book for December showed flight time of 81 hours and 59 minutes of B -707 jet time.

January 1960 continued full scheduling, with trips to Frankfurt, Rome, Copenhagen and London - for a total months flying time of 87 hours & 4 minutes. These busy schedules continued: February - 73 hours +; March - 87 hours +, April 106 hours (when a turn around flight added unexpected hours). In May, I went on vacation.

(The pilot contract regarding pay was as follows: Pilots were guaranteed 70 hours of flight time pay - for which Pan Am could schedule them for that amount. If the 70 hour figure was exceeded, proportionate extra pay was added - up to a limit of 85 hours. Should flight time exceed 85 hours - then the hours over 85 were put in a bank of time - to be used for any month when flight time was less than 85 hours. Bank hours were limited to 35 hours.)

I continued to fly full schedules for the remainder of 1960 - always flying to be credited with 85 hour pay - and often adding to the bank. Consequently, at the end of 1960, I learned that I was the highest paid pilot in Pan Am for the year - plus having 35 hours of flight bank time. That pleased me, because I did not mind flying full schedules, and I wanted to insure I made maximum pay. Scheduling recognized that any emergency need for a pilot, Captain Evans would accept the assignment - if available. For this, they were appreciative - because many pilots would not cooperate.

The Jets were capable of high speed (.90 mach - or 600 mph), greater passenger loads, and extended range (5500 miles) - but the ability to fly at high altitudes gave added safety and comfort for passengers. Consequently, high levels of 31,000 - 39,000 ft. were used for normal flights - and if on extended flights - climb to 45,000 ft. may be used for fuel economy. Only once, did I ever use 45,000 ft level - on a flight New York to Rio de Janeiro, Brazil.

Flight above 30,000 ft. was desirable for many considerations. Fuel economy was a primary reason. However, it resulted in much smoother flights for the passengers, by being above most of the clouds. Thunderstorms do extend much higher (50,000 - 70,000 ft.), but if you were above the lower clouds that hid them, they could be avoided by steering around them. Radar was also available to avoid thunderstorm cells. High altitude was the location of "Jet Streams" - the narrow bands of high speed wind conditions between air masses. Meteorology became very adept at locating the areas of "Jet Streams" - so high flying aircraft could use them for high speed tail winds (100 - 200 mph) - or to avoid them if going the opposite direction - seriously affecting flight time. The highest wind jet stream I have experienced was near Gander Field, when I noticed the auto-pilot correcting for drift - eventually reading 33 degrees. When the wind was determined mathematically, it was blowing 230 knots.

High altitude flight resulted in an unusual phenomena - that was enjoyed by both crew and passengers. The scene was a result of a hurricane that had been tracking up along the eastern coast of the United States - and now had veered away into the Atlantic Ocean - and was centered northeast of Boston. Pan American dispatchers had issued an alert for flights that might encounter the storm. Our flight was en-route to New York - and presently near the western end of Nova Scotia flying at 39,000 ft. We were beginning to see the build up of clouds, and could identify the thunderstorms near the center. The thunderstorms appeared to be below us, so there was no need to climb higher or divert around them. Our course would take us very close overhead, so we could identify the outer low clouds, and the center of thunderstorms. Then, we were nearly overhead - and could see down in the middle of the thunderstorm circle, and could identify the eye - a clear area about 15 miles across, where we could see the ocean. It was the classic structure of a low pressure area of a hurricane. I brought it to the passengers attention as a rare sight that few are ever privileged to see. They were thrilled - especially as we were cruising in smooth air a couple thousand ft. above the storm. Remembering my flight through a typhoon in the Pacific during the war years - I much preferred to fly above one. It was a sight I have never forgotten - and when the subject of hurricanes arises - that scene above one comes to mind.

I was on a B 707 flight nearing Boston - and destined for New York. I was in the cabin meeting with passengers when I met an elderly lady who seemed a little disturbed. We talked, and soon found she was not a comfortable passenger, due safety concerns. She had a very active imagination, and it was bothering her. She said, "I know that it is not likely to happen - but what would be the result, if all four engines were to quit at the same instant? Would the airplane drop like a rock?" It was so absurd, I almost laughed. But, she was serious about asking the question - so I would give her a serious answer. I replied, "We are nearing Boston - and when I am overhead, I will ask New York for a descent clearance. We are flying at 35,000 ft. - and when we are cleared to descend - I will fully retard the throttles - taking all the power off the four engines. Our speed will gradually slow - and we will start descending at 1500 ft. per minute - and will glide the 200 miles from Boston to New York. So, no, we will not drop like a rock, but become a glider for 25 minutes to go 200 miles" She was incredulous, and responded, "That's amazing". She seemed more relaxed when I left. I hope she will repeat her new information to her friends - Pan Am needs the passengers.

For years, our Pan Am President, Juan Trippe, had been trying to convince the U.S. Government that Pan American be designated the U.S. flag carrier on foreign routes. Most countries of the world had such a airline representing that country. However, the President and Congress were not persuaded, preferring that several airlines provide competition to the foreign carriers. Politics was a big factor in that decision.

Competition was fierce for international passengers. Pan Am, with their fleet of B 707's was expanding their routes - and wanted a "Round the World" flight route. It was essentially completed with the New York Division flying eastbound (Flight #2) around the world ending at San Francisco. The Pacific Division dispatched a westbound flight (Flight # 1) around the world, ending in New York. A crew turn around base about half

way (Thailand) served to allow crews to pass their aircraft to crews from the other Division - to return to their home base. The passenger continuing east - or west - could remain with the airplane to his destination.

This "Round the World" service ended at San Francisco - or New York - because Pan Am was denied the right to fly and carry passenger across their own country. Political influence - naturally. They wanted to protect the domestic airlines. Incredibly, the Government approved Quantas (Australia) and Air Japan to flight rights across the U.S. before Pan Am was authorized to do so. When Pan Am did fly across the U.S. - they could only carry passengers coming or going to foreign airports. Politics.

As Pan Am took delivery of additional B -707 's - they were also taking delivery of the Douglas DC -8's. Since I was already qualified on the Boeing jet equipment, I did not bid the DC -8 or ever fly the plane. However, the expanded jet fleet allowed Pan Am to replace propeller equipment, and expand jet service throughout their system. Consequently, I was again flying into cities that I had been to for a few years. I was back again into Vienna, Istanbul, Ankara, and Tehran. In July 1961, New Delhi was added to the "Round the World" flights - and the route shifted north. From London, the stops eastbound were Frankfurt, Istanbul, Tehran, to New Delhi - on to Bangkok. On the Tehran to New Delhi leg - the route took us over Afganistan - a country of rugged mountains. Continuing to New Delhi - if the weather was clear, I liked to drift northward so we could see Mt. Everest - before regaining our course. If in view, I liked to tell the passengers - as it always gives them a thrill to see it. After New Delhi, the flight continued to Bangkok.

Jet flights over long distances (involving several time zones) was causing a new phenomena called "Jet Lag" among crew and passengers. It was an upset of the body clock routine, that regulated our normal daily lives. By crossing many time zones, and living different hours of daylight and dark, the body gets confused and rest becomes irregular. The route leg that affected me the most, was the Istanbul to Bangkok - with stops at Tehran, New Delhi, Rangoon, and Bangkok. We crossed 6 time zones - flying all night and half the next day. We flew 12+ hours and on duty 16+ hours - with no en-route rest. When we arrived Bangkok, I was usually very fatigued. When I arrived the hotel, I would eat a meal, then go to bed expecting to sleep 10 - 12 hours. Instead, I would awaken in 3-4 hours - still tired but wide awake and restless. I would toss and turn for several hours - tired but unable to sleep. This was a new reaction for me - as I always slept easily and soundly. It was "Jet Lag", but I didn't know of such a thing - and it was upsetting me. As I experienced it more - and learned the cause of "Jet Lag" - I stopped fighting the feeling. When I awoke prematurely, I would get up, shower, go for a walk - and get a meal. As I relaxed and felt sleepy again -I could go back to bed and this time sleep well. Crew members have tried many solutions - including alcoholic drinks - but the one I adopted worked for me. Understanding the problem, helped to accept and learn to relax. Most crew members report that when they return from a "Round the World" flight - it takes three days to return to a normal feeling. Even passengers who travel an extensive distance - find that they are subject to "Jet Lag" even though they have a chance for some rest on the airplane.

March 23, 1962 - I departed New York on a "Round the World" flight # 2 arriving London on schedule after an uneventful flight. Our crew had the usual 24 hour layover - and scheduled to continue on this day's Flight # 2 to Frankfurt, Vienna, Istanbul and Beirut. Our flight time to Frankfurt was :55 minutes - with an excellent weather forecast. Our flight was normal until we neared Frankfurt - and received our landing clearance - and tried to lower the landing gear. The first indication of trouble was the red light on the gear indicator, that the nose gear was not down and locked - plus an unusual air noise from the nose area. We raised the gear normally - then tried lowering it again - and had the same results. We had a problem - so advised the tower and asked for a pull-up clearance - and an area to hold, so we could assess our problem.

We operated the gear a number of times - with the same result. For some reason, the gear would not extend to the down position. I advised the passengers, trying to minimize the problem - expecting we would soon solve the matter. Since the gear would not extend normally, we now considered a manual extension, using a bar to force it to extend. To do this, the Flight Engineer had to open a hatch in the floor, to go below to execute the operation. When he returned, he reported that the nose gear was partially extended, but no amount of force of the bar could force it down. Now, the reality of our position was becoming apparent - we may have to land without benefit of a nose gear. When that happened, the plane center of gravity would allow the nose to drop - and we would roll on the main gear - and slide on the nose of the airplane. Since nose wheel steering would not be available - staying on the runway may present a problem.

I called the Purser to the cockpit to apprise her of the problem, so she could inform the other flight service personnel, and to prepare the cabin and passengers for an emergency landing. I told her that I would talk to the passengers at this time to inform them of the emergency condition. When she left, I used the Public Address system to talk to the passengers - trying to sound confident as I described our problem. I said that we were in no hurry to land - as we had several more ideas to try. Further, I asked them to cooperate with Flight Service as they prepared for the landing - estimated in one hour.

In the meantime, we were talking to our Pan Am Operations office to inform them of our problem, and the expected delay in landing. They contacted New York, who contacted the Boeing factory engineers for any suggestions. Within the hour, they had nothing to help that had not already been done. Pan Am did have another flight about to take-off who volunteered to fly close enough to observe the nose wheel gear. They did - and reported that which we already knew - the nose wheel was partially out - but could not identify why it would not extend further.

We had now been circling for about 90 minutes - waiting for any suggestions from Boeing or the Pan Am engineers. But, they could offer no solution. I wanted to reduce my fuel load - so I circled 30 more minutes before trying a last attempt to lower the nose gear. I received permission from the tower to bounce the airplane on a runway - to try to jar the nose gear loose.

Advising the passengers again of my intentions - I approached for the bounce maneuver. The first attempt was too light a bounce - so I climbed slightly and bounced again a little more firmly - but with no success. I applied power and climbed back into the airfield traffic pattern. Now there was no doubt - we were going to make a main gear only landing. I so advised the tower - and asked that the fire trucks foam the center of the runway, where I would attempt to keep the nose of the plane. That would contain any

sparks that would be present - and still let my main gear be out of the foam that is very slippery.

I shared my landing plan with the First Officer and the Flight Engineer - and they concurred . I planned to land short on the runway, holding the nose off the runway until our speed reduced and the nose started to drop. Then, I planned to lower the nose into the foam on the runway. At the moment of the nose making contact, I would reverse the engines to slow the aircraft - and also to apply full braking on the main gear. Should the plane start to veer off the runway - the engineer would cut the engine power and the electrical system to avoid any spark to any spilled fuel. Barring any unforeseen incidents, I felt confident that the plan would work successfully.

Flight service had been instructed to evacuate the plane immediately after stopping - just in case of a possible fire from spilled fuel. That meant actuating the emergency slides - and starting moving the passengers out without further command. They were warned that the rear slide would be steep, with the tail unusually high. Flight Service had found a deadhead crew member and two military men to help with the evacuation. They reported all loose objects had been stowed away - and they were ready for the landing - and the cabin evacuation. They also reported that the passengers were in good spirits for the unusual event..

The Frankfurt tower advised me that they were ready on the ground - with runway foamed - fire trucks standing by - and extra personnel ready to help if needed. I made my final address to the passengers and flight service - telling them that I was confident the landing would go well. Further, I would give them a 30 second warning to brace, as they had been instructed.

Everything possible had been done to prepare for this emergency landing - and I started my approach to landing. As we neared the ground, the First Officer gave the 30 second warning to brace. The aircraft came over the runway - and touched down very smoothly - with the throttles retarded and the aircraft slowing. I felt the nose start to lower of it's own weight - so I gently lowered it into the foam on the runway. I applied full brakes, and at the same time reversed the engines to slow our speed. We were slowing rapidly - and soon almost stopped. The engines power was cut - and the electrical power turned off. As we came to a complete stop - the nose veered slightly to move out of the foam. That was fortunate, since anyone trying to walk in the foam would slip and fall.

Flight Service performed perfectly, opening the doors and extending the slides - and starting the passengers out of the plane. They were timed by ground personnel - and 140 passengers were evacuated in :55 seconds. Fire trucks and ambulances arrived promptly, as well as trucks with ground personnel. Since we obviously did not have any real emergency - everyone relaxed - to talk and recount the events. Buses arrived shortly, and the passengers were taken to the terminal. I observed most of this from the doorway - as I was in no hurry to disembark. The cockpit crew gathered up their briefcases - and then disembarked to see the damage to the nose. It was obviously bent a little, but there was little serious damage. (Later, I learned that there was little damage - only the nose gear doors were crushed, and a strut was ground down about 1/4 inch from runway friction. When the plane was jacked up -the problem was found. A centering cam for the nose gear had sheared its rivets and turned on it's shaft - allowing the nose gear to turn slightly in the wheel well - and prevented it from being able to extend outward.)

(Later, I learned that the centering cam had apparently been faulty for some time, as the maintenance log reported tire marks on the nose gear door. Somehow, the marks were wiped off and not investigated as to what caused them. It was a most unusual problem - not normally recognized. Frankfurt Maintenance reported that our airplane with the nose problem had so little damage, that it was repaired and put back into service in one day.)

When I left the airplane on the runway, and came to the Frankfurt terminal, I was met by the local FAA Inspector. He congratulated me on a job well done - and reported that the landing would be classified as "an incident" and not an accident. He asked that I write up an informal report for his records. He reported that he had followed all the radio communications and had observed the landing - so he had all the facts he needed.

When I reported to Dispatch, I was told that another B 707 was coming from London to continue my flight # 2 - and "Did I want the command to stay on my original schedule"? I inquired of my crew about what they would like to do - and they were unanimous about continuing on their schedule. So, I agreed to take the relief plane on our original schedule. All our onward passengers agreed to continue - not losing one to a cancellation. So, 6 1/2 hours late on our schedule, we prepared to continue. As I boarded the plane, my passengers broke into applause for me - which pleased me very much. One passenger said to me, "You know, I thought it was going to be more exciting than it was." That really pleased me - as we must have done our job right.

The landing "incident" made the papers. It was a feature story in the Frankfurt paper, with photographs. The New York Times put it on the back page of the financial section. My wife was notified by Pan Am - with the news that I was continuing my schedule.

Agreeing to taking the flight onward was a mistake. In Frankfurt, all the crew and myself, were on an adrenaline high, so we were willing to take the onward flight. But, as the hours passed, all of us became extremely fatigued - and listless. When we arrived Beirut, many of us fell asleep in the cab going to the hotel. I'm glad we didn't have another emergency - or critical weather while flying. When I made a detailed report to the Chief Pilot, one of my recommendations was to never let a crew continue after an accident or serious emergency

After my return from the trip with the Frankfurt "incident", the Chief Pilot invited me to have lunch with all the available executives. As the guest of honor, they made some very complimentary remarks about the handling of the landing. I thanked them for my recognition - but I thanked them for the quality of the crew and the training they provided. I sent letters of commendation to the department heads of each crew member - with a copy to the individual person. These would be placed in their personal files. Pan Am Frankfurt sent me a set of pictures of the aircraft resting on it's nose - and also the newspaper stories- as a memento.

A route expansion that was anticipated, was the New York to Mexico City. Application to the Civil Aeronautics Board was approved, and was sent to the President for approval. Pan Am had been practically assured the route approval - and had prepared

B - 707 Continued

for the inaugural flight. Politics, must have come into play, for the President unexpectedly awarded the route to Eastern Airline. This was quite a blow to Pan Am, and was even reported as such by the New York papers. Pan Am was not being awarded international routes - and was being denied domestic routes. For their outstanding contribution to the war effort - and unusual cooperation with government requests for flight charters - this treatment seemed unfair. Was it politics?

Sometime in the mid-'60s, I was scheduled for a flight to Bermuda. After arrival, I was informed that Mr. Juan Trippe and family would be aboard for my return flight to New York. They owned a house in Bermuda - and apparently made the flight often. I was pleased to have him aboard - as I had never seen the President of Pan Am in person - in all the 25 years I'd been with the company.

As I walked through the lounge to go the aircraft, the Station Manager said that Mr. Trippe would like to meet the pilot. He proved to be a very quiet and reserved person - yet very sharp and knowledgeable. I expressed my pleasure at meeting him - stating that I had been with Pan Am since 1940 - but had never had the opportunity to meet "The Boss". He smiled - and wished me well. Needless to say, I performed my best on that flight - and even managed "a grease job" landing. I never saw him again in my career - but I remember him as a personality - and my "Boss". His contribution to aviation won him world wide recognition - and deservedly so - as his airline was recognized as a world leader. It made me proud to be a part of that recognized organization.

Speaking of personalities, Col. Charles Lindbergh was a Vice-President with Pan Am, in an Advisory capacity for airline operations. He was always a person I greatly admired for his historic flight across the Atlantic to Paris in 1927, and his courage to speak frankly to President Roosevelt about Germany and its air power. In spite of the Presidents stripping him of his military rank, he volunteered to serve aircraft manufacturers as an advisor, to improve aircraft performance during the war.

He rode Pan American flights often, and was always considerate about waiting to be invited to visit the cockpit - where he preferred to ride. I waited - and anticipated my opportunity to meet him. I even carried his book about War Experiences with me in my briefcase, so I could ask him to autograph it. In all those years, it never happened - as he was never a passenger on my airplane. Unfortunately, he became ill - and died - making me regret even more that I never had the chance to meet him.

In 1965, I had been a member of the Airline Pilots Association union for nearly 25 years. Generally, I had been satisfied with the union - but had no desire for a leadership position. Lately, I was becoming disillusioned with national leadership for being aggressive regarding membership - seeking a closed shop as pilots for all cockpit members - and threatening pilot strikes. Our own local chairman was acting the bully - and using foul language at meetings - and with Pan Am executives at negotiations. That was the situation when a national issue arose that brought the union in conflict with the President of the U.S. - over a threatened national strike.

Eastern Airline pilots had been on strike for an issue that was very controversial. The pilots union (ALPA) wanted Eastern Airlines to replace the professional flight engineers (non-pilots) with a pilot, trained to do flight engineer duties. In their opinion, that would increase safety - in case a pilot was incapacitated in flight. (It would also increase available pilots for union membership)

The strike was a long extended one - affecting passenger travel and the national economy. The Eastern Pilots were being financially supported by all other ALPA members by an assessment. Due to the impasse of the strike, and the effect on the country, the President issued a Presidential order - "for the pilots to return to work - while the issues were debated for a possible solution". The Eastern Airline pilots refused - and remained on strike. Defying the country's President is unacceptable - according to my standards - and from that time I stopped paying the assessment for the Eastern Pilots salary. Another consideration for me, was that Pan Am had professional flight engineers, with whom I had worked for years. I would not favor a plan to replace them with pilots - just to satisfy the union.

Eventually, a solution was found, and the strike resolved. The flight engineers would be trained on primary flight trainers to become private pilots - thus being technically qualified in an emergency - and they could join the pilot union. However, the union had assessed me nearly \$800 that remained unpaid - and were threatening me with expulsion if it was not paid. I decided to resign from the union - rather than compromise my principles and my right. Apparently, my view was shared by many ALPA members, and they resigned also. American Airline pilots were so dissatisfied, they withdrew from ALPA altogether and formed a new union. ALPA membership declined dramatically in the next few years - (unofficially representation dropped from 95% to 83%). I was ostracized by Union leaders for non membership - but I did not lose my friends or regard by Pan Am executives. (A few years later, the Union sought compulsory membership for all pilots - or at least compulsory dues. This succeeded for a short while until Congress changed the law.

During the late 1960's, Pan Am changed our flight scheduling system. They prepared a schedule of a months flying time of flights, for as many pilots as would bid on these schedules. The pilots would bid on as many schedules as he chose, listing them by sequential choice - and he would be awarded his preference by his seniority number among the pilots. I do not think I ever was awarded less than my third choice, even though my seniority among the B - 707 group was about twenty. My bids were based on routes I wanted to fly - and those that gave maximum flight time for maximum pay. In addition, Scheduling often called me for unscheduled flights, if I was available, for test hops, charters, etc. because they knew I would accept, if possible. Flights that I particularly bid were - "Round the Worlds" to Bangkok, Thailand - or Paris and Rome - or occasionally to Detroit & Chicago, so I could visit family. As a result, my flight time was maximum - yet I was still "at home" about half the time of the month. The time I was gone from home, was offset by the amount of time I was at home, to do quality activities with my family. This resulted in attendance at athletic events, and other school activities of the children - and a few years of community affairs for our Church and being a Scout Master of a local troop.

Anyone who has had a reservation problem with an Airline will like this story of a passenger who beat the system. It happened on a routine flight of mine, from Frankfurt destined for Detroit, Michigan. The flight was routine, Frankfurt to London, but as I was leaving the plane to go to Dispatch, I was aware of a heated discussion with a male passenger. Pan Am personnel were trying to get him to disembark the plane - and he refused. When I asked him why he would not - he told me this story.

He said that before he left Detroit, two weeks earlier, he had confirmed his return flight, and showed me the confirmation message. He said that he had been to Paris and Rome - and reconfirmed his return flight from Frankfurt to Detroit. Then, yesterday, when he arrived Frankfurt, he had been informed that he could go to London, but there he have to disembark and wait for another flight, as they were overbooked. He said that he had the records of his confirmations - and he did not intend for them to off load him, as it was important that he arrive Detroit. (I was impressed with his quiet demeanor and determination - and expressed my sympathy.)

It became apparent that Pan Am had a problem. They had oversold the airplane - and now wanted to make him a victim - and he refused to be victimized. He had paid for his ticket - and had reconfirmed three times - so he had a strong legal stand. When I talked to the Pan Am Traffic Supervisor, I was told that his seat was needed for a VIP group that they very much wanted to accommodate. His refusal to move was causing an embarrassment - especially since the passenger's reservation pre-dated the VIP group. Then, a solution was found - when Pan Am found a First Class passenger willing to stay in London with all expenses paid - and give up his seat. But, inexplicably, the Detroit passenger still would not move - and was adamant about it.

Again, I talked to the passenger - and inquired why he would not accept a first class seat - and give up his economy seat. Since we were on friendly terms by now - he confided to me his reason. He said that he was entitled to his economy seat, by reservation and possession. If Pan Am took it from him, he could claim damages - so he would stay. If he left his seat - going to First Class - he was afraid that they would hustle him off the plane as he passed the entry door. He did have a point. So, I contacted the Traffic Supervisor to tell him the passenger's concern. The Supervisor assured me that this was not the plan - and accompanied me to the Detroit passenger to assure him the transfer was legitimate. Mr. Detroit was still skeptical - and reluctant to move. So, I volunteered a solution. I told him that as Captain of the flight - if he would be willing to move, I would guarantee that he would get his First Class seat - or I would refuse to fly the airplane on this flight. He considered - we shook hands on the deal - and Mr. Detroit started packing up to make the move to First Class.

Our flight departed London - and Mr. Detroit was aboard and enjoying his First Class status. When I stopped by to chat with him - he thanked me for my promise to intercede for him. But, I told him that I felt he had every right to his seat, and that I admired his stand - and his challenge to anyone trying to take away his rights. We were together all the way to Detroit - and parted as friends who saw eye to eye. I hoped we had not lost him as a future customer.

(A reflective moment in the cockpit - 37,000 ft over the North Atlantic Ocean)

It was a Charter flight from Chicago to London. Everything had gone well. Cocktail hour had relaxed everyone - dinner had been served - and now friends were gathering in groups to chat and enjoy after dinner drinks. It was a convivial atmosphere of animated conversation, jokes and lots of laughter - they were having fun.

That was the scene as I stepped out of the cockpit to relax a moment. But, no way was I going to get involved with that happy group - so I returned to the cockpit to reflect on the situation. Here we were in an enclosed capsule, flying at 600 mph, at 37,000 ft above the North Atlantic Ocean, at night, with an outside temperature of minus 76 degrees Fahrenheit. It was a hostile atmosphere - above a hostile spot on earth. Yet, we were warm, well fed, and a party spirit being enjoyed in the cabin. We were isolated, yet we could talk to a station on either side of the ocean. Was it an incongruous situation to contemplate - or had aviation reached a new level of acceptance for passenger confidence?

It was a far cry from the early flying boat days that I had experienced just 20 years before. The progress in aviation has been phenomenal.

Sometimes, a minor matter will grow out of proportions - and it becomes a matter of principle. During my crew briefing on a flight, New York to London, some of the crew complained about the crew meals. It was the result of a new Pan Am economic policy to avoid the waste of expensive meals. Consequently, after the passenger count was determined, an exact number of meals were put aboard for service. There was a variety of entrée choices - one of which was sweetbreads. While I personally enjoy sweetbreads, many persons do not - including my crew members. And, that was the crux of the problem. If sufficient passengers did not order sweetbreads, some of the crew found it was their only choice for dinner. And, they did not like it - and some would not eat it. I thought their objection was valid - and received their endorsement to order steak for the crew. I would see to the arrangement.

When I boarded the plane, I found the Commissary loader - and explained the problem, and ordered steak meals for the crew. His response was, "Sorry Captain, I have my supplies - and I am not allowed to make substitutions." My answer was, "As Captain, I am requesting the substitutions - and will take the responsibility for the change." He said he would consult with his Boss regarding the request - and left. Soon he returned with the message, "Sorry Skipper, the Commissary Supervisor said No". When I asked him if he had explained about the crew getting stuck with a meal they disliked? "Yes, he had explained that to the Supervisor", he answered. Then, I requested, "What did he say?" His answer was, "Tough".

Now, I was mad. I told the Loader to return to the Commissary Supervisor and tell him that this aircraft was not moving until the requested meals were loaded - as requested. And, further, if the departure was delayed - it would be charged to Commissary - in my report.

Departure time was growing close - when finally the Loader returned and reported, "O.K. Skipper - you've got your steak meals". I thanked him - and asked what had happened. He said that the Commissary Supervisor had contacted the Station

Manager - and he had called the Vice President of Operations to complain. But, the Vice President had told the Station Manager that he had best honor the Captains request - adding, "Because I don't like sweetbreads either".

Our flight was 5 minutes late, but I called it "on time" to avoid charging it to Commissary (with an explanation). Flight service gave extra good service on that flight. The crew enjoyed their steak meal - and happily there was a sweetbread meal for me. I expected to have a note from the Chief Pilot on my return - but it didn't happen - and I was content to ignore the issue. Soon, the Commissary policy changed - and crews could order meals that were reserved for them.

The International News coming from Beirut, Lebanon was electrifying. A building occupied by U.S. Marines was bombed by a truck crashing the gates, and exploding to kill about 250 Marines. The incident had the potential of war by invasion from American troops - and civilians were trying to leave the country. There were many Americans in Beirut that would be caught in the conflict - unless evacuated. Pan Am, as usual, met the crisis by offering to the U.S. government, aircraft and crews to go in and bring them out.

I was in Rome when the assignment came - to proceed to Beirut to evacuate Americans. There as no guarantee of safe conduct for these civilian flights - but the crews were willing to go. We left late afternoon from Rome, to make the 1469 mile flight to Beirut - not knowing what reception we would get. We arrived about 8 PM - and received a landing clearance. We found the airport jammed with Americans and other nationals - all frantic to leave Beirut. We learned that Pan Am had three aircraft diverted from normal flights expected to arrive - as well as several other nations sending aircraft for evacuation of their nationals.

As soon as we could refuel - the passengers were loaded - and within the hour we were taking off. We were destined for Ankara, Turkey - about 400 miles away. In :50 minutes, we were over Ankara and receiving landing clearance. The passengers were expected, and the Pan Am personnel did a marvelous job of organizing and answering their questions. As soon as the passengers were off the aircraft, we prepared for the return to Beirut. We did not bother to have the airplane cleaned, or load food, as time was critical. Flight Service tidied up the airplane en-route - and soon we were landing at Beirut. Again, our time on the ground was minimal - as Beirut had the passengers designated to board - even in excess of available seats. Most of the passengers were women and children - and obviously a little distressed by all the commotion - and unanswered questions. Our Flight Service were wonderful - helping mothers with children - finding food for hungry children - and reassuring mothers that Pan Am in Ankara was ready to assist them.

Soon, we were airborne and en-route again to Ankara. We found that our flight was the only one going to Ankara - as other aircraft were being sent to other cities - to avoid a congestion problem. We landed the second time at Ankara, and they were well prepared to care for the passengers. This time, they passed out blankets for the needy, and had buses ready to take them to housing facilities.

We made two more round trips that night - with the operation going very smoothly. The Pan Am ground personnel at Beirut and Ankara deserve the credit

for working long hours under difficult circumstances. The same can be said for our flight service crew - who met the demands without complaint - and were so helpful to those who needed them. When the job was done, we realized that we had flown 16 hours of flight time - and been on duty for 24 hours. We slept well, knowing that we had responded when we were needed. Later, we learned that the President had commended Pan Am with a Presidential Citation for unusual national service. Our crew was commended by their department heads - and letters placed in their personal file.

The FAA (Federal Aviation Authority) has a job to do - enforcing the laws for safety in aviation. Twice I was cited for a possible violation, but I'm happy to say, I was exonerated for both. (Temporarily, it was worrisome, because they control my pilot license to fly.)

The first instance, was a citation for failure to use the designated "preferential runway" to avoid noise on take-offs over congested areas adjacent to Kennedy Airport in New York. The reason was simple - and if the FAA had investigated - they would have had their answer. The facts were: When Dispatch had planned the flight - the preferential runway was a different and longer runway - and my aircraft was maximum loaded accordingly for that runway. Later, the preferential runway was changed. So, when I taxied out for take-off, I was directed to the new preferential runway that was too short for my heavier gross weight. I told the tower that I could not accept the assigned runway - as my gross weight exceeded the allowable for that runway - and I requested the longer runway. The tower insisted that I must use the "designated runway" - which, of course, was not legal or for safety considerations possible. I reminded him that the pilot of the aircraft has the legal right to select his runway for take-off. That seemed to irritate him - but he realized I was right - and he did direct me to the requested runway. However, he kept me waiting for 20 minutes to allow other aircraft to precede me. Finally, I received my take-off clearance - and a warning that I was being reported for failure to use the preferential runway. Maybe I was sarcastic, when I thanked him - and acknowledged my take-off clearance. (If I had been wiser, I would have called Dispatch to warn him about the runway problem - but my mind was on my flight.)

Sure enough, when I returned a week later, I had a letter from the FAA - citing me for a possible violation. I wrote a reply, based on the facts, and the necessity of using the runway that I used. My decision was based on necessity to satisfy legal and safety requirements - and not capricious preference. Further, I had informed the tower of the necessity - so he knew the reason for the non-preferential runway use.

I took my reply letter to the Pan Am Chief Pilot, who was unaware of the citation, to get his reaction - and to add his endorsement of my decision - if he agreed. He concurred, and his letter of endorsement was added to my letter to the FAA. Later, I received a letter from the FAA - stating there was no violation. There was no apology - but that was too much to expect. The letter went into my file.

Within the year, I had a second letter of citation from the FAA, stating a possible violation - for landing at London below legal limits of ceiling and visibility. (200 ft. ceiling & 1/2 mile visibility).

This was the situation. I was due to land at London - and the weather minimums were critical for ceiling and visibility due to fog. But, the landing conditions were varying - at times planes were landing - although at other times, planes were forced to pull up. When my turn came to leave the holding pattern, I elected to attempt the landing. The reported weather was 200 ft ceiling and 1/2 mile visibility - which is legal for me to land - so I was hopeful. However, about one minute from the airport, the tower advised me that the landing conditions were 100 ft. and 1/4 mile - below landing limits. However, since I was qualified for "look-see" privileges - I continued my approach to the runway. ("Look-see" privilege means that I may descend to my legal limit of 200 ft. - and if at that time I can see the runway lights - I may continue to approach and land. The reason for the privilege is that weather conditions vary from moment to moment - and are not consistently the same.)

That varying weather conditions existed at London now. So, I continued my approach - hoping that a favorable patch would move in for my landing. I had briefed my First Officer to call out the altitude every 100 ft. - while I closely monitored the flight instruments and power. When we reached our altitude limit of 200 ft. - he was to call out and then look for runway lights - while I still flew the airplane. If he saw runway lights, he would call out, "I see the lights". Then, I would confirm the lights - and if in sight - I would continue descent and land on the runway. (If the First Officer did not see lights at 200 ft. - I would initiate a pull up and climb back to altitude.)

That was the situation at London. When the tower reported 100 ft and 1/4 mile - that was at his measuring point - and the actual conditions for the aircraft could be better. We continued our approach - and was reaching the critical decision point. Then, the First Officer called out, "200 ft - - and then - Lights". I looked up - and confirmed the runway lights were in sight - and continued to descend to the runway and landing between the lights. The weather was minimal - but acceptable for landing. We did have some confusion in taxiing - where fog patches were particularly thick - but we arrived the terminal without incident. The "look-see" privilege paid off - allowing a landing instead of a diversion to an alternate airport - that is an inconvenience to passengers and a great expense to Pan Am.

But, the tower recorded my landing as below limits (100 ft & 1/4 mile). The U.S. FAA picked up on the fact - and cited me for landing below limits. Again, they did not get the facts. So, again I wrote a reply letter - citing my "look-see" privilege - along with a statement from my First Officer confirming he saw landing lights at 200 ft. I also included a letter from my Chief Pilot - endorsing my landing under "look-see" privilege. Happily, a second letter arrived from the FAA - confirming there was no violation for the landing - and none recorded on my record.

It may appear that I had a problem with the FAA - but that is not really true. They have a job to do monitoring the FAA regulations - to achieve aviation safety. While they can be a little over zealous individually - I have always gotten along well with the Inspectors when they rode with me on flight checks. I respected them - realizing they had wide experience by flying with many Airline Pilots. If they had any suggestions, I was happy to listen. Our relationship was always congenial. I was happy to have my two FAA incidents behind me - and those were the only two in 36 years of Airline flying - which in retrospect is not bad.

There is a FAA regulation prohibiting a pilot sleeping in the cockpit. Technically, I probably agree with the regulation - but practically, I think the subject could have been covered under the Captain responsibility for the safety of his flight. Consider: If conditions develop that the pilots are fatigued and fighting sleep - and there is a critical instrument landing to be made. Would it best serve safety of the flight to not sleep - and be legal? Or, would it be practical, and safer, to take a 10 minute catnap, while the other two cockpit members are monitoring the flight - and awake refreshed. I have faced that situation many times - and while I could not legally sleep - I did relax and "rest my eyes" for a few minutes. I offered the same privilege to the other cockpit members - not to sleep, but to "rest their eyes" - and I think it was the safest procedure under the circumstances. That is part of my Captain responsibility, to operate a safe flight - even if rules are bent to achieve it.

NEWS ITEM - In 1968, Mr. Juan Trippe, President and CEO of Pan American World Airways, announced his retirement, resigning from his active duties to the Corporation. He would be succeeded by Captain Harold Gray, a former pilot with Pan American in it's early pioneering days, and lately a Vice President of the Corporation.

Mr. Juan Trippe, was the founder of Pan American Airways, building it from a modest local service facility to the pre-eminent position of a world recognized "Leader in the Industry". Pan Am pioneered international routes - and helped to design aircraft to make it possible. This dates from 1927 when flying boats opened service throughout the Caribbean and South America - and later to pioneer ocean crossing flying boats on the Pacific and the Atlantic oceans. His pioneering leadership inspired his employees to "go the extra mile" to achieve success of the operation. They took pride in being the "best in the world" - and insuring that it would remain so. For example - flight crews would stay with the flight to completion regardless of duty time ; - and I have seen flight engineers fly all day - and help ground maintenance crews at night to insure the plane was ready for schedule. On a flight delay - ground personnel would work extra hours until the passengers departed - or were comfortable in a rest facility. That was the Pan Am spirit in the developing years of the airline - due to loyalty up from the employees and to the loyalty down from the executives. Consequently, Mr. Trippe was held in high esteem.

Mr. Trippe was disappointed with the U.S. Government policies that restricted his Airline from domestic routes - and further expansion. When he resigned, the airline never seemed to regain it's vitality. Mr. Trippe sold his Pan Am stock (approx. \$86 per share) and transferred it into development of Bahama real estate. Pan Am declared bankruptcy in 1992 - and sold its routes and equipment. (More later on this subject.)

In the fall of 1969, our youngest child Scott, went off to school at Parks College in East St. Louis. Wilma and I had planned a move to Heritage Village in Southbury, CT. We had bought a Condo - and when it was ready - we moved in. When Scott returned home for Christmas vacation - he had a new address. He took it in stride - but Wilma and I always felt some guilt - because he could not return to his familiar home.

Boeing 747-100 - "The Jumbo Jet"

Compared to -

(Shown on the next page)

Boeing 707 - 120 Jet

(Little Brother)

Statistics: B - 707-120 Jet

Length - 153 FT

Span - 146 FT

Height - 42 FT

T.O. Gross Wt. - 336,000 lbs.

Power - 4 X 18,000 lbs. Thrust

(P & W JT3D)

Speed - 700

Range - 4000 S.M.

Seats - 135

(Big brother)

Statistics: B - 747 - 100 Jet

Length - 231 FT

Span - 196 FT

Height - 63 FT

T.O. Gross Wt. - 710,000 lbs.

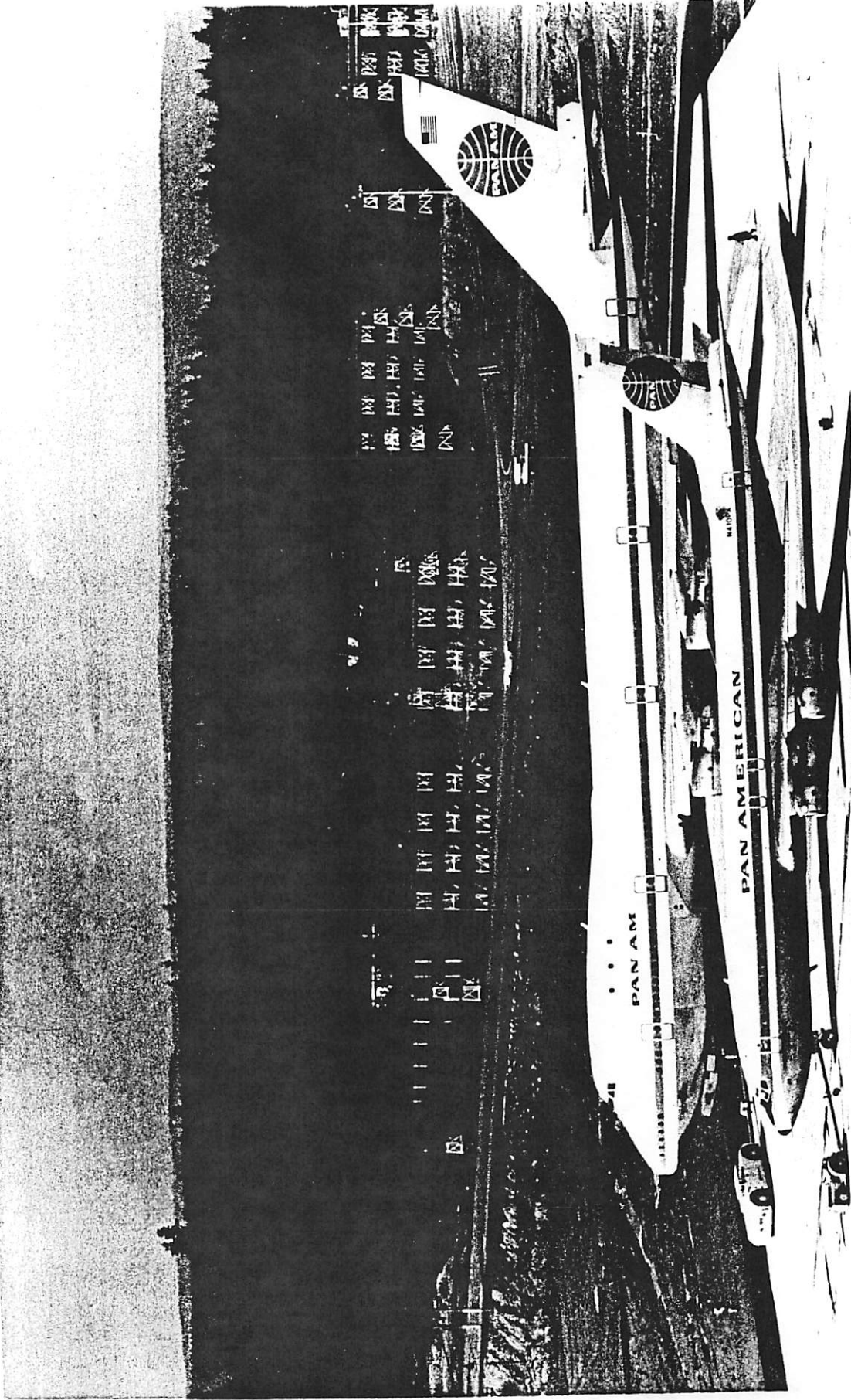
Power - 4 X 43,500 lbs. Thrust

(P & W JT 9D)

Speed - 589

Range - 5500 S.M.

Seats - 370



BOEING 707 & 747 @ Boeing Factory - "Big Brother / Little Brother" (1969)

BOEING 747 - 100

(Shown on the next page)

Statistics: (Built by Boeing Aircraft Company)

(The Boeing 747 was nicknamed "The Savior" - due to many peoples reaction upon seeing its size close at hand - and exclaiming "Jesus Christ".)

Length - 231 FT Span - 196 FT Height - 63 FT

Take-Off Gross Weight - 710,000 lbs.

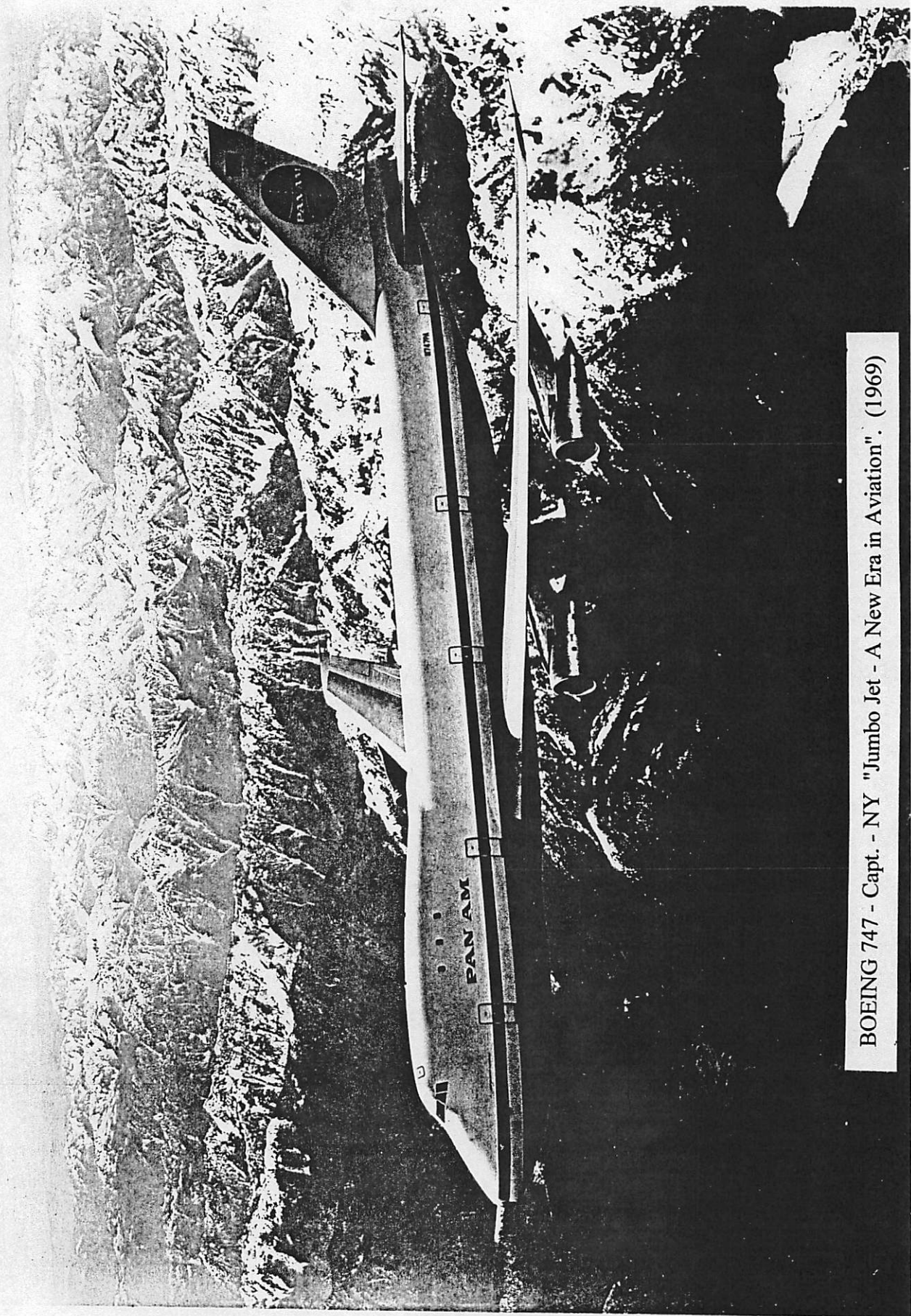
Power - Pratt & Whitney JT9D - (43,500 lbs Thrust)

Speed - 589

Range - 5500 Statute Miles

Seats - 370

April 13, 1966, Pan American & Boeing Aircraft Company announced a Pan American order for 25 Boeing 747s. Each would cost \$21,000,000. (By 1986, the cost had risen to \$ 110,000,000.) The size was awe inspiring - and created admiration throughout the aviation world. Boeing needed a complete new factory to build this size aircraft - and it was constructed at Everett - north of Seattle. Construction of the 747 proceeded at a record pace - and the first 747 made a successful maiden flight February 19, 1969. Pan American planned to start scheduled service by Christmas 1969 - but overheating engine problems caused a delay until January 21, 1970. (It is noteworthy that, in the past, most commercial aircraft used equipment that had extensive test experience - often by the military. The 747 was entirely new, with power plants that had not had extensive tests to eliminate the "bugs". Consequently, Pan American had to accept this chore by being "first to fly the 747".) But, the new aviation era had begun - and during the next 16 years 800 of the giant aircraft were produced. Today - in the year 2002 - the 747 is still being produced.



BOEING 747 - Capt. - NY "Jumbo Jet - A New Era in Aviation". (1969)

1969 - '70 - CAPTAIN - B-747

All during 1969, advance publicity was heralding the development and the introduction of the Boeing 747. It was going to be the largest passenger aircraft ever developed. It would require new powerful engines that Pratt & Whitney was designing. New and more powerful tow vehicles were needed to move it. Plane ramps had to be strengthened to support this behemoth - and new passenger boarding ramps had to be developed for the extra height. A new era of aviation was about to be introduced - known as the wide-bodied jets - or Jumbo Jets.

When the Captain bids for the B - 747 were offered to me, I eagerly accepted. Contrary to past bids, when more senior pilots introduced the new aircraft, this time my seniority placed me among the vanguard to introduce the aircraft. I had never seen the airplane, except in pictures, but the hype of the promotion made me want to be a part of the new era.

I started ground school in early November 1969. The classes lasted for 6 weeks, and the instruction was the most thorough I've ever experienced. Everything was new about the aircraft - it's size and configuration, gross weight, new engines, new hydraulic systems, five sources of electrical power, three auto pilots, three inertial navigation systems, and passenger seating requiring new evacuation systems for emergencies. I never had to study so hard since graduation from college. I even took manuals home to do extra study. In addition, I obtained a photo display of the cockpit of near normal size, that I set up at home to develop familiarity. Then, by using the check lists for operating the aircraft, I familiarized the location of each item - so I could immediately locate and identify and touch the item. This drill proved to be very helpful - and accelerated my progress with the airplane when I finally got aboard.

Pan Am had set up a special flight training school in Roswell, New Mexico. This was advantageous to avoid the winter weather delays, and the crowded skies of the East Coast area. I heard that the 747 cost \$1200 per hour to operate, so delays could be costly. Roswell had a large military field that had been abandoned - so it would be ideal for our training - and for others coming later.

Soon after I finished ground school, I received notice that 12 crews would fly on commercial carriers to Roswell to begin flight training. We left Dec. 12th - with no expectation as to a return date. I told Wilma that she should not expect me for Christmas - but maybe before New Year. Our Pan Am pilot group flew into Roswell, arriving after nightfall. Before we left to go to our Motel, we learned that a 747 was on the ground on the other side of the airfield. Since none of us had seen the aircraft, we were eager to go see it. As approached the area where it was parked - the hangar hid it from view until we were close at hand. Then, we suddenly saw it with the flood lights on it. It was huge - like a building instead of a plane. Suddenly, I knew why it had been nicknamed "The Savior" - because my reaction was, like many others, "Jesus Christ". It was huge - and I stood there awestruck. Not only was I impressed, but a bit intimidated. But, then I remembered the words of an older Captain who told me, "Sure the airplanes keep getting bigger, but the part I look at, out the windshield, is always the same. So, I don't care how much they put behind me, just so it flies like a plane".

The Boeing 747 statistics are impressive. The length is 231 ft. - enough to nearly fill a football field. The tail height was 63 ft. - nearly 7 stories high. It would weigh 713,000 lbs.- yet with four engines developing 43,500 # of thrust could climb to 45,000 ft. and fly at a speed of 600 mph. The cabin was 20 ft. wide - for two aisles and 9 seats across - accommodating 362 passengers. There were 6 galleys and 12 lavatories. Fourteen flight service would be required to serve the passengers. There was an upper deck reached by a circular stairway - where the cockpit and a passenger lounge was located. Pan Am was buying a fleet - at a cost of \$25 million each. By 1986, the cost was \$110 million each.

The pilots and flight engineers arriving for flight training were housed in a nearby Motel that included a dining room. There was frequent transport available between Motel and the airport. For flight assignments, a special car would pick us up - to insure an "on time" report.

I had brought all my 747 training materials with me - including the pictorial panels of the 747 cockpit. I set the panels up in a corner, simulating my own 747 cockpit. With the 747 check list, I could practice locating the check list items on my pictorial panels - developing the proper instincts of where to look for the control. I found the system very helpful. But, there is nothing like the real cockpit itself. So, any time the 747 aircraft was on the ground, I could often get an hour in the cockpit to improve my familiarity. Since, the airplane was in service 24 hours a day, I found myself doing some familiarity sessions at some odd hours. But, it worked - and I soon began to feel very comfortable about the location of every control in the cockpit. I even tried it blindfolded, having someone read the check list - and I would point to the item. This same familiarity worked for looking out the cockpit window - to get used to the new perception while sitting 30 feet in the air.

Every time I entered the 747 to do my cockpit routines, I lost more of the awe and intimidation of the aircraft. On the day I was assigned for flight training, I was eager and ready to fly. The cockpit routine went easily - just like the practice. But, when we started to taxi - cockpit perceptions were new and required experimenting. But, a few maneuvers taught me that it just needed more room to move the big bird around - but it was like driving a building. I was impressed with the ease of nose wheel steering - and the power responded well with the throttles. The taxi practice went well - and now we would fly. Other than feeling a little disconnected with the cockpit so far off the ground, the take-off went well. At V2, I rotated the yoke to cause the plane to start flying - and was amazed at the power and the ability to climb at a steep angle.

After reaching our desired altitude, I was allowed to "feel out" the aircraft maneuver capability. It was incredibly light on the controls - and actually reminded me of a fighter plane. We did steep turns, stalls and recovery - to prove it was the best flying aircraft I'd ever flown. In the air, it was so light and positive - one forgot it's size. Now, we would try landings. The 747 is different than any other plane I'd flown. The distance from the eye level to the ground did make a difference in pilot technique. What worked best - was to approach the runway at a normal descent - then at 50 ft. on the altimeter - retard the throttles and raise the nose slightly - and hold that attitude. The plane would enter the compressed air between the wing and the runway - and momentarily stop descent. Then, as the compressed air bled off, the aircraft would sink the few remaining

feet and gently touch down. It made beautiful landings - in spite of it's size. I made the mistake of trying to help the landing -by raising the nose at expected touchdown - and only succeeded in driving the gear onto the runway for a harder landing. So, I learned to discipline myself to stop the final nose raising - and success was mine. The 747 wants to make beautiful landings.

One more maneuver - and my first flight was finished. The instructor said that he would make the approach to the runway - while a shield blocked my vision outside. He instructed me that when he called out, "Its yours" - and removed my shield - I was to take control and make the landing - doing what was necessary to land on the runway. I watched the instruments as we descended for the runway. At 500 ft. he called, "It's yours" - and removed the shield. We were way left of the runway. I applied a little power - made a steep bank to the right to close with the runway. As we drew closer, I made a steep bank left to line up with the runway - then reduced power to settle down for the landing. I had proved to myself - the capability of the plane to maneuver - which is what the Instructor wanted to demonstrate. Such ability may avoid the necessity to pull up and go around - when a landing is possible. My first two hour session went well - and my confidence in the airplane was sky high.

Each pilot was scheduled for six, or more, two hour sessions of training - and when ready - be scheduled to fly with the FAA Inspector for a rating ride. I had completed four of the two hour sessions, when the Instructor informed me that he was scheduling my next flight with the FAA Inspector. I was surprised, then pleased that my training had gone so well. I liked the 747 - and was confident I could handle it. I credit this to the serious application to study and hours of cockpit familiarization. FAA test rides are always a concern - because of possible goofs. But, my concern was groundless, as the flight went well - and after only one hour of testing - was told to "take it home". We landed - and the FAA Inspector made out my temporary B-747 rating license. The permanent one would come in the mail.

My rating ride completed - I was informed by the Station Manager that I had two hours to pack - and catch a flight to New York. Further, he informed me that I was scheduled to fly a 747 flight New York to London in 26 hours. Events were moving fast - but I was thrilled at the prospects. The first two 747 flights had been commanded by the Chief Pilot and the Ass't. Chief Pilot. I would command the 3rd 747 flight New York to London. I was a proud man when I arrived home to announce to my wife about the assignment. I departed New York on schedule, with a full passenger load of 362 - and had a perfect flight. My return flight went equally well - and I now enjoyed the prestige of being a B -747 pilot. I had not lost sight of the dramatic increase in flight pay - and I liked that too. As my Alabama room-mate used to say, "I was walking in tall cotton" - and very pleased with life.

Flying a B - 747 aircraft that carried 362 passengers and a crew of 17 (3 cockpit & 14 Flight Service) has a responsibility for evacuation in case of emergency. While I was at Roswell, NM for my flight training, I was privileged to be a part of the crew on the FAA Evacuation Test Program. It had been decided that a viable system must evacuate 362 passengers from the aircraft in 2 minutes. The test was to use uninitiated passengers - and not trained employees. So, Pan Am advertised for Roswell citizens

to come to the airfield - and be a part of aviation history. They responded enthusiastically - as it would give them the opportunity to see this new and unusual aircraft.

On the night of the test, the 362 "passengers" were selected for a normal airline standard in age and gender. They were loaded aboard and given the standard briefing for a normal flight departure. Essentially, this covered the instructions to use the door nearest their seat - not to rush - but make an orderly exit without delay. This would be done when they hear the Captain announce, "This is the Captain - this is an emergency - evacuate the aircraft immediately".

Pan Am and the FAA had observers all around the aircraft. When everything was ready, the FAA signaled the Captain - and set the clocks running. The Captain made his announcement - Flight Service opened the 10 doors that automatically activated the emergency slides - and passengers started sliding down. With the height of the 747, the slide angle was rather steep - so passengers came off the bottom fairly fast. Agility helped, but some needed help to move them away from those persons following.

The test was a success - as the last passenger came off the plane in 1 minute & 55 seconds. There were shortcomings - such as the man who caught his foot on the slide, stood up and fell over the side, and broke his leg. Another, was the inclination to turn and watch the show, after completing the slide, causing congestion. And, it was found advantageous to have two strong persons to help clear the bottom of the slide for the less agile. However, the FAA endorsed the evacuation test for the 747 - having met the time limit. The improvements could be addressed later.

After my initial flight New York to London, I continued being assigned with minimum time off between flights. Consequently, I was flying 85 hours plus each month - to give me maximum pay plus building up my bank hours. Additional qualified pilots were being made available, but additional 747 aircraft were arriving to keep everyone qualified fully scheduled. Pan Am was expanding the 747 routes to Frankfurt and Paris - and Pan Am was enjoying enthusiastic passenger acceptance. There were some delays for aircraft problems, but mostly they were of a minor nature. These problems were the normal kind that are experienced on the introduction of new technology. It takes actual flight experience for them to show up - and gradually have them corrected. All aircraft preceding the 747, were given their shakedown by the military, on engines and airframe - thus making the airline introduction relatively trouble-free. On the 747, this was being done by Pan Am - since they were the first to receive the aircraft. Excepting the minor problems, the B - 747 was a highly successful aircraft.

The B - 747, or Jumbo Jet, as it was being reported, was continually in the news after it was introduced. It was new, unusual, and represented a big step upward in aviation development. Consequently, when I was recognized in the community as a 747 pilot, I was interviewed by local papers for articles, and I was invited to speak at local organizations. While I was not eager to perform in public, I felt I had a message that they deserved to hear. So, I developed a speech entitled, "30 Years of Aviation Progress - from Flying Boats to the Boeing 747". It was an incredible development - and I had experienced it all. Consider these statistics:

1940 - Boeing 314 (Flying Boat)

Length - 106 ft.
Height - 28 ft.
Wing Span - 152 ft.
Weight - 82,000 # (Take-off)
Speed - 152 mph
Passengers - 74
Range - 3500 miles
Altitude - 10,000 ft. (Unpressurized)
Engines - Wright 1500 H.P. X 4

1970 - Boeing - 747

Length -231 ft.
Height - 63 ft.
Wing Span - 195 ft.
Weight - 713,000 # (Take-off)
Speed - 600 mph
Passengers - 362
Range - 5500 miles
Altitude - 39,000 - 47,000 ft.
Engines - Pratt & Whitney 43,000#
X 4

Pan Am had been in the foreground of the development of both aircraft - providing the airline requirements information and engineers to help development. Boeing engineers, however, were responsible for final successful product.

In addition to the marvel of airframe and engines, there were many innovations and technical improvements in the B - 747. One of these was the Inertial Navigation System - the same concept that guided the Apollo moon rockets. It is an internal system on the aircraft that does not need outside signals to guide the aircraft. Consequently, it could be used anywhere in the world to navigate to another destination. Typically, on a flight New York to London - the flight route could be programmed into the Auto Pilot System - and guide the aircraft to its destination with an error of +/- 3 miles. The 747 had three Auto-Pilot systems available to fly the aircraft, navigate it to its destination, and even make Automatic approaches to the runway, and land it automatically, if selected.

On a flight New York to London, the standard procedure for the pilot would be to make the take-off manually and fly the exit route. Sometime about 2000 ft. altitude, he would elect to engage the auto-pilot, allowing closer personal monitoring of the flight. As the departure progressed, Air Traffic Control would clear the flight to go directly to the first check point of our filed flight plan. That Latitude and Longitude had been programmed into the Inertial Guidance System - and for every 10 degrees of Longitude all the way to London. By selection, the auto pilot will now fly the airplane for the selected route all the way to the destination. As the pilots observe the passing of each check point, this information is radioed to New York or London.

At arrival in the London area, the auto-pilot will be switched to manual operation, to follow directions to approach the airport. When directed to the intercept heading for the ILS (Instrument Landing System) the Auto-pilot may be switched to Auto Land. - allowing it to completely control direction, altitude and power for the aircraft. The pilots are closely monitoring the flight for proper response. Intercepting the ILS runway signal, it will turn and follow. Intercepting the glide slope, the power will decrease and the aircraft descends. Landing gear and flaps are now extended by the pilots. The aircraft continues descent to 50 feet on the runway indicator bar - then the power automatically retards, the nose raises slightly - the aircraft smoothly touches down. Now, the pilot takes control - disconnecting the Auto-pilot, raises the speed brakes and reverses the engines to slow the plane - and applies the brakes to achieve taxi speed.

Auto Land was a significant development for airline operation, to permit lowering of landing minimums and avoiding expensive diversions to alternate airports. To help passengers appreciate the capabilities of the system, when we made an Auto Land I informed them by Public Address - adding a little humor. On the taxi in, I would announce, "Ladies and Gentlemen, you have just experienced an Automatic Landing - a new feature on the B - 747. In fact, ever since we left New York, your flight has been operating on the Automatic Pilot. However, one feature that has not been perfected yet - and that is Automatic Taxi - to take you to the terminal. That is why a pilot is still necessary for this flight - and I will have you at the terminal in two minutes. I hope you have enjoyed your flight."

As Pan Am received more 747's - their use extended to Rome, via Paris - and also from Lisbon and Barcelona. It was a favorite flight to bid - as Rome was a tourist paradise. The sightseeing was exceptional - and the food and wine inexpensive but very good. It always amused me that carafe wine and bottled water were the same price. My favorite place to eat in Rome, was a small family owned restaurant - where I nearly always ordered the same meal. It was minestrone (with fresh Italian rolls), cannelloni that had an excellent cheese sauce, served with a carafe of chianti wine - dessert was crème caramel with espresso coffee. It was delicious - and made me long for it when away - and that's why I ordered the same meal when in Rome. The proprietor, with whom I was friendly, once told me, "You know - we do serve other things".

Pan Am had made their employee travel policy even more attractive - by allowing employees of 25 years service to have unlimited travel privileges. So, I encouraged Wilma to go along on many of my flights, since the children were gone from home, and she was free to go. She would accompany me about once a month -being entitled to an economy seat. But, once she was aboard, if there was room, I'd ask the Purser to move her to first class. She reported that she rather liked First Class seating with gourmet meals, fine wine(Champagne), and attentive service. At the layover bases, she rode the crew bus, and shared my hotel room free of charge. Sightseeing time was limited, but we could return again - and again.

When Wilma and I were in Paris, and I was due to fly to Rome and return, she would stay in Paris to enjoy the sightseeing. But, occasionally, she would ride along, just for the flight and a lunch in Rome. She said it was fun being a part of the jet set.

From 1972 - '76, Wilma and I conferred on my monthly bid for flights. If she had a choice of a route or place, I could bid to make it possible. That allowed her to see the principal cities of Europe where Pan Am landed - and the stops Pan Am made on the "Round the World" flights. These were Istanbul, Beirut, Tehran, Karachi, New Delhi, Rangoon and Bangkok. (Later, I'll recount some of our Pacific flights together.)

Pan Am was expanding it's European flight to Moscow - and I was eager to go to a new place and a new experience. But, when I learned of the Russian requirements, I was less enthusiastic. Russia required a visa to enter the country. That meant that I would have to submit my passport to the Russian Embassy in New York - and they kept it six weeks before it was returned with the visa. That was unacceptable to me. It meant a six week delay in flight schedules - and a loss in pay for that period of time. So, I told Pan Am thanks - but no thanks. I would pass on that route opportunity. I never did get

to fly to Moscow - but I have few, if any, regrets. Many of the senior pilots rejected the bid for reasons similar to mine. The pilots who did fly the route reported that it was a rather unsatisfactory experience. The hotel was only fair, the food poor, and sightseeing very limited.

The Chief Pilot called to ask a favor. Even though I was not a check pilot at that time, he asked if I would be willing to accept John Doe (fictitious) as my First Officer on my next trip to Bangkok. He wanted a report on the pilot for his flight performance. He told me that John Doe had a reputation of doing good flying - but then - doing a dangerous act. He suggested that I give him a number of take-offs and landings - and make a report. I was curious - and accepted the assignment.

When I met John at the airport prior to our departure I was favorably impressed. I made the take-off at New York as it is customary for the Captain to make the initial control. En-route to London, we got better acquainted - and I found him personable and knowledgeable. Arriving London, I asked him if he would like the landing - as I wanted to see him perform. He did well - and I had no criticism.

For the next 7 days, on our flight to Bangkok, I shared take-offs and landings with him. There were 12 of each - and John handled 6 of them. I made minor suggestions to him - but generally he performed satisfactorily. I fully expected to report a near normal performance - until he attempted a fair weather landing at Frankfurt. He made his approach for the landing very routinely - and had reached 150 ft. - when he suddenly retarded the throttles and raised the nose as if ready for a touchdown. But, we were much too high - and if we had stalled at that altitude - we would have sustained serious damage. Fortunately, I reacted immediately, and applied full power and took over the controls. The 747 sank toward the runway in a sickening way - but the full power gave us just enough speed to give lift and the descent stopped. But, we were near stall all the way down. Then, being near the runway, I reduced power and made a firm but satisfactory landing. That was a close call - and as a Captain in command - an accident would have been charged to me.

After we arrived at the terminal, I asked John if he could explain his actions. He could not, and was visibly shaken at the near accident. He could only say he was sorry. It was inexplicable to me also, as there was nothing to excuse his actions for a near accident - and John knew it. If he had an excuse - or reason - he did not share it.

When I arrived New York, I arranged to see the Chief Pilot to give him my report. I tried to commend the good aspects of his flight, but reported the Frankfurt near accident. The Chief Pilot stated that the report fit his profile - 90% normal flight - 10% with serious errors that were not tolerable. Later, I learned that John Doe resigned - and I hoped it was in another line of work. Serious errors can not be found acceptable in aviation.

I am reminded of another First Officer, with whom I did not seem to develop a rapport. He was a military pilot - and did not seem to want to forget it. Consequently, he often compared Pan Am to the military - and Pan Am was found wanting - in his opinion.

The incident I'm remembering was the flight Frankfurt to Munich. He was flying the 747 - having made the take-off at Frankfurt and now cruising at 30,000 ft. The weather was clear - and we were nearing the time to start descent, but he was not making

any moves to do so. I made some hint remarks about descent, but they were ignored. Finally, I directly pointed out that we would be too high, if we did not start descent soon. He indicated, with annoyance I think, that he was O.K. Finally, he slowly went through the check list, and started descent. Nearing Munich, it was obvious that we were going to be too high - and he actuated the wing spoilers. This would allow a steeper descent without building up airspeed - but our Pan Am manual specifically stated it should not be used except for emergencies. It causes vibrations, and is alarming to passengers. So, I placed the actuators down - and informed him that it was contrary to Pan Am manual instructions. His retort was, "they use them in the military".

As expected, we arrived over Munich too high to land, so I requested a circle, so we could lose altitude. Again, he misjudged, as we were still too high as we approached for the landing. Now, in spite of the discussion about the use of wing spoilers - he actuated them again - causing vibrations throughout the plane. I put the wing spoilers down again - and then commanded, "I have the airplane" - and took over the controls. By reducing power, putting the landing gear down, and early extension of wing flaps, I was able to continue to a landing without another circle. It was not airline quality flying, but it saved the embarrassment and delay of a second go-around.

After arriving the terminal, and shutting down the engines, I told the First Officer I would like to discuss the approach and landing. I could see that he was furious - but he had to listen. "First", I said. "You do not know your Pan Am manual about use of wing spoilers for normal descents. Second, when I gave you instructions about not using them, you chose to ignore them, and put me in jeopardy with the Chief Pilot for permitting it. And third, if you can't obey a Captains orders, I don't want to fly with you.

He left his seat in a huff - but he could not have been much of a military man if he didn't know about following orders. His attitude did not change for the rest of the trip - consequently I did not offer him a take-off or landing - and we had little to talk about. My report to the Chief Pilot outlined the incident - and a request that we not be assigned together on future schedules. I learned that he left the Atlantic Division - transferring to the Pacific Division - so I never had contact with him again. These kind of challenges to a Captain's authority are not unheard of - but are rare - fortunately. (I would be curious about his "efficiency report" in the military.)

I had been flying to Europe and the "Round the Worlds" rather steadily, so when I was offered a charter flight from New York to Rio de Janeiro, Brazil. I readily accepted. I had not been to Rio since about 1943, as a co-pilot, so this would revive some old memories. Rio de Janeiro is a beautiful city, built around a large deep harbor, with surrounding hills and mountains as a background. The beach is extensive and wide, with exciting surf, and a beautiful view seaward. The architecture is dramatic - in style and color. The avenues are wide, giving space to enjoy the views of the surrounding beauty.

The flight New York to Rio is 4883 miles, so it is nearly the maximum range for the 747. The flight time was estimated at 8 hrs. 20 minutes - at 37,000 ft. We left New York late evening en-route to San Juan, Puerto Rico - then onward to Port of Spain, Trinidad. (En-route, I remembered my flying boat days out of Miami - and making stops at several islands along the way. Those flights were a joy to a young Captain on his first command. And, there was romance to the pioneering days of aviation.)

Almost too soon, we overheaded Port of Spain - and requested climb to 41,000 ft. for more economical fuel consumption. By radar, I could see the coast of South America, and some of the major rivers on the east coast, where I had landed flying boats some years past. The night was so black, that nothing could be identified otherwise. As we flew over the Guiana Highlands, I could see the lightning flashes of the thunderstorms of the Intertropical weather front. I requested climb to 45,000 ft. to insure that we would be above the storms. As we flew above the thunderstorms, I could appreciate the beauty of the scene - and enjoyed seeing the lightning flashes up and down the frontal line of storms. It was very satisfying - because I remember the heavy rain and turbulence flying through them at low altitude in past years.

Flying over the black Brazilian forest below, made one wonder about the people living there - and the contrasts between our lives. It was a good philosophic moment - and pilots are fortunate to have such times for reflection. The black night was soon replaced by the lights of the city of Brazilia - standing out like a vast jewel. It is a very modern city, created out of the undeveloped land, after World War II - and is still developing.

Passing Brazilia, we are now only an hour out of Rio - and will soon need to start our descent. Early light of dawn is seen in the east - so we can expect to make a daylight landing. The late weather broadcast is for cloudy conditions - overcast at 1000 ft & 5 miles visibility. We'll miss a view of the city from the air, but the landing conditions are well above our minimums. We start our descent 25 minutes out of Rio - descending at 1500 - 2000 ft per minute. We are enjoying a smooth descent - and enter clouds at 8000 ft. We are cleared to the outer marker, and then a straight in approach to the active runway. We break out of cloud at 1000 ft - with the airport in sight - and the city in view beyond. The sun is about to rise - and the sky is golden. We touchdown - after a nearly 5000 mile flight - while passenger got a nights sleep. That's modern technology.

We had 16 hours in Rio de Janeiro - but I managed to go to the beach - and I saw the city between airport and hotel. Our return flight was a repeat of the one south - smooth, uneventful, and covering a long distance in a short time.

Routine scheduled flights - sometimes turn out - not so routine.

Pan Am had recently adopted a policy of loading minimum fuel on their flights - whenever the forecast was favorable for little or no delay at the destination landing. The reason for this policy was economic. It had been determined that it cost 10% of the fuel - just for the energy to carry it. If it was not needed - why carry it?

Minimum fuel for a flight was in the FAA regulations. Their formula was: 1. Fuel enough to make the flight to it's intended destination. 2. Added fuel to divert to an alternate airport. 3. Added fuel to hold at that alternate airport for 30 minutes before landing. This minimum was reasonable - if the forecast was infallible. But, if the forecast 8 hours in advance is not an exact science - either on en-route winds or destination weather, flight diversions will occur and the economic reason becomes invalid. Meteorology errors can and do happen - and it happened to me.

My flight originated in London - with New York my destination. The forecast was for excellent weather in New York - so minimum fuel was loaded. Our flight was routine to overhead Gander Field, Newfoundland - and then I got my first hint of

possible trouble with the New York weather. The forecast had changed, and now it was - "increasing clouds due to fast moving cold front - possible snow showers and limited visibility". This was totally unexpected, but no cause for real concern, as the weather was well above landing limits - so I continued toward New York. Nearing Boston, I requested the New York weather. It was now - Snow, with ceiling 500 ft. and 1 mile visibility - 10 minute delay in landing. With the short delay, I hoped to land at New York -so I elected to continue to New York. I advised New York of my limited fuel - and that I could hold no longer than 20 minutes - and my alternate airport was National Airport, Washington, D.C. After Boston, I started my descent - and when I neared New York was directed into a holding pattern. The weather was now - Heavy snow, with ceiling 300 ft and 1 mile visibility. I reminded Air Traffic Control of my limited holding time - and my alternate. The weather was deteriorating rapidly - and soon I was advised that my holding time was extended to 30 minutes - and possibly longer to snow plow the runway. I responded that I wanted an immediate clearance to National Airport, Washington, D.C. - and waited nervously for the clearance. Because I had alerted them earlier, the clearance came promptly - and we were cleared to Washington, D. C. The weather report there was only fair - with increasing snow - ceiling 700 ft and visibility 2 miles. Not good, but acceptable. (And, this was the excellent weather that was forecast.) We proceeded to Washington - and received a descent clearance. All the while we had an eye on the clock and the fuel readings - estimating we would have 25 minutes fuel at landing. We approached the National Airport traffic pattern - and had begun to relax. We turned on to the final approach leg - and were about 4 minutes from landing - when we were advised by National tower that -"The airport was closed due snow on the runway - and what were my intentions". This was incredible - but my options for diverting were nil, so I told him, "I am landing at your airport on this approach - either by declaring an emergency - or you may clear me to land. I do not have fuel for an alternate diversion". Now, the tower realized my predicament - and cleared me to land. We broke out of clouds at 500 ft. and ahead of me was a lighted runway. I landed smooth as silk on the snowy runway - and then plowed through snow to the terminal parking area. When we shut the engines down - I realized that I was rather tense - because we had used up our last option for a successful landing. Before we shut off the radio, we heard the tower advise other aircraft that the airport was closed.

Later, I filed a report with the Chief Pilot, suggesting the minimum fuel policy be reviewed - and in addition - the responsibility of the Dispatcher when drastic station weather changes occur. He had access to Meteorology, and could best assess the potential for drastic changes. Then, he could have sent an alert - and a recommendation for landing en-route at Gander - Boston - or any other suitable alternate. Later, I learned that the weather was a surprise to many - when the cold weather front moved more quickly than expected. Like I said - some routine flights - are not always routine

Someone once told me in past years, "Accidents are usually the result of three mistakes that lead to the event". I have often remembered those words of advice - and agree that the assessment is valid. Consequently, I have tried to eliminate the steps leading to a potential accident - and the consequent personal regrets. When step one occurs, it is time to reconsider. If step two occurs, you had better act - before step three happens - and there are real regrets.

1973 Vacation Flight - "Round The World"

Pilot vacation bids for 1973 were due for submission - and Wilma and I were considering our options. Literally, the world was available for consideration - with the Pan Am employee travel policy making the flight portion a free benefit. The matter was resolved when I realized that I had never circumnavigated the world - and I proposed that we do so. My scheduled flights over 32 years had taken me westerly to Hong Kong - and easterly to Bangkok, Thailand - but I had never flown the area between the two places. Our two eldest sons, Robert Jr. and Thomas, had already completed this distinctive achievement in earlier years, so Wilma and I wanted to do the same while it was easily available to us. I bid for the month of October - and as the date approached - made arrangements for tickets. Our passports were in order - and no special visas were required. We planned to fly the Pan Am Flight # 2 - a Boeing 747 aircraft that departs from New York to make the westerly flight around the world. (Pan Am Flight # 1 was a Boeing 747 that flew from New York eastbound around the world.)

Wilma and I were excited about this new adventure as we boarded our flight # 2 - that would take us to Tokyo, with an en-route stop at Fairbanks, Alaska for refueling. The Captain announced that the distance to Fairbanks was 3313 statute miles and a flight time of 5 hours 40 minutes at 32,000 ft. Our employee complimentary ticket entitled us to Economy Class seating, but the Purser soon appeared to inform us that the Captain had invited us to move into the First Class section. (This courtesy may be offered if space is available in First Class.) We were happy to accept - and would reciprocate, if and when opportunity arose in the future.

The flight became airborne and turned to a northwesterly direction. The weather was clear - so Wilma and I enjoyed checking the geographic landmarks below. As we neared the Great Lakes area, we realized that we would cross the state of Michigan - our former home state. We were excited to see landmarks we knew so well. Wilma became especially excited to recognize Muskegon, Michigan - where she lived earlier and enjoyed the Lake Michigan beaches with her family.

Shortly after the Michigan panoramic views, flight service was offering cocktails, followed by an excellent dinner. Pan Am is noted for the fine food and wines served in First Class. So, we relaxed and enjoyed the high level living. Sightseeing was finished - as night was coming on - and we were over plains country with few cities or other identifying features to see. A movie was offered for our enjoyment, but I chose to relax - and promptly fell asleep. I awoke only when the lights were brightened and the landing announcement was made on the P.A. system. The Skipper made a superb landing.

Wilma and I had never been to Alaska - so we enjoyed this first experience in our 49th State. But, there was little to remember except a dark military airport - with a pleasant terminal to walk about. We could pick out the native Eskimo and Indian types - although they wore normal western dress. There were a few souvenirs to buy - whale bone carvings and Eskimo dolls. They were attractive, but too early to load up on this early in our travel.

The flight boarding call came - and we went aboard for the second leg of our journey - Fairbanks to Tokyo. The Captain advised us in his announcement that the flight would cruise at 32,000 ft. - en-route time was estimated at 9 hrs. and 40 minutes for the distance of 5658 statute miles. The take-off was at night - so it was not possible to observe anything on this largely uninhabited land. Referring to our passenger map however, our route was noted to be over western Alaska, then over the Bering Sea, and just south of the Soviet peninsula of Kamchatka to the islands of Japan. Again, flight service offered a movie, and we watched for a while, then sleep overtook us. When we awakened, it was dawn and I could see a land mass to the right of the aircraft that I guessed was Honshu Island. When descent was started, we were about to cross the coast - and I was alert to see the city and Tokyo Bay. When we neared, the city looked very modern with many tall buildings and busy roadways. Apparently, our flight was cleared directly to Haneda Airport, as we made one right turn and was on final approach to the airport - and landed smoothly.

The airport was very busy, but I was impressed with the efficiency and courtesy of the Japanese personnel. We were soon cleared through government formalities - and being directed to the crew bus, on which we had been invited to use for transport to the hotel. The 50 minute ride to the hotel was mostly on high speed roadways - but our views of the city were interesting.

Our Hotel Okura was beautifully situated in a quiet section of the city and in close proximity to the Emperor's Palace. After checking in and having a short rest, we decided to take a walk to the Palace area. We could see the wall surrounding the Palace grounds, and decided to walk around it. A number of Japanese people and tourists were doing the same, in hopes of a special glimpse of the gardens through some open gates. The Emperor is held in great reverence by the Japanese people, and it would make their day, if any of the royal family was seen. We were not fortunate enough to see royalty, but we enjoyed seeing the pedestrian Japanese people, especially the older ones in traditional clothing. The walk around the Palace grounds was longer than we anticipated - and we estimated it at about 3 miles. By the time we returned to the hotel, we were ready for tea that was being served.

We were eager to try a traditional Japanese dinner, so asked the Concierge for his recommendation. It was a short taxi ride away - in a quiet district. It may have been a former residence and very elegant in traditional furnishings. We were warmly welcomed - and shown to a low table that would require that we would have to sit on the floor. Happily, we discovered a well area under the table that would accommodate our legs and feet - making it considerably more comfortable. Looking about, we were impressed with furnishings - colorful but in excellent taste. For our benefit, English was spoken - and we ordered a traditional meal, leaving many choices to the Head Waiter - but requested no sushi - as I did not favor raw fish. What I did like was the warm sake, with tiny fish cakes. Serving were young ladies in beautiful kimonos, who were very attentive for our needs. The meal progressed to a stir-fry of sukiyaki, cooked right at our table. Dessert was small sweet cakes, fruit and tea. During the meal, a string trio played softly on odd

traditional instruments - creating a very pleasant and relaxing atmosphere. It was a memorable first night in Tokyo. Since the hotel was only a short distance away, we decided to walk - and enjoyed the opportunity to see people along the way.

Our second day was a bit of variety, as we tried to experience the spirit of Tokyo. We saw the Tokyo Tower that offered a view of the city, but we finally declined to ascend. Instead, we decided to visit Meiji Shinto Shrine - and the Ueno Park. The park was extensive, sharing gardens with cultural complexes, temples and shrines. It would have taken days to see it completely, but it was most impressive.

Our lunch was an interesting experiment. We were in the Ginza commercial area seeing the fast paced life of Tokyo - and we were getting hungry. We saw a restaurant that was obviously meant for tourists - as they had typical meals displayed in plastic in the window - with a number to identify it. We decided to try it - and it proved to be excellent - and certainly helpful to the uninitiated tourist who spoke no Japanese.

We wanted to ride the subway - and entered a station and picked a destination. We were impressed with the cleanliness of the station - and the logical maps and efficient operation. (In my opinion, our New York system compared poorly.) Our destination required a transfer station - and when we arrived - we disembarked. We were unsure of how to proceed - and was studying the subway map. Apparently, our puzzlement was recognized by two young female students, and they stopped to help us. We were recognized as American, so they spoke to us in English. We quickly were informed about our required directions, but the students wanted to practice their English - and asked us many questions. We chatted about a number of subject - and were having fun with them. We were joined by other students to listen in - and also to try their English skills. It was a most enjoyable encounter.

We wanted to see more of Japan - so we rented a small car to drive to Izu peninsula where a rugged scenic area contains many hot springs and spas. En-route, we had to drive through Yokohama and stopped to see the Sojiji Temple that houses a very large Buddha statue. There were other tempting pagodas and temples to see, but we had to push on to keep our reservation at Hakone. We arrived somewhat late - but loved the hotel - with its statuary and gardens. When we checked in, we were informed that we would find kimonos in our room - and it was customary to wear them to dinner. Arriving at the room, two beautiful kimonos were hanging there for our use. Wilma and I laughingly tried them on - and decided to "do what the Romans do - in Rome". Yes - we would wear them to dinner. But, I was a bit sensitive to the "play acting" as we entered the dining room. My fears were groundless - as nearly everyone was wearing a kimono. It was a fun experience - and we felt very international to be there. After dinner, we strolled the gardens and admired the statuary - along with other hotel guests. I remember the quiet and peaceful setting as we watched the sun setting over the mountains.

Reluctantly, we left Izu peninsula to drive the back roads to Tokyo. It was very pleasant on the quiet roads - seeing many beautiful places we would have liked to visit. However, we planned to take the "Bullet Train" from Tokyo to Osaka early the next

morning - so return was necessary.

We had been advised to arrive early for the train - as it departs on an exact schedule. Sure enough - we were aboard and watching the station departure clock - when the doors closed and the train moved exactly on the second hand departure time. Our train cars were similar to those in the U.S. - but the ride was very smooth - and gradually accelerated to a speed of 125 mph. as displayed on a instrument panel. That speed made the outside scene move very quickly - similar to low altitude flight. There was no dinning car - but food was available to passengers from vendors who came around with baskets with a variety of choices. I enjoyed an excellent tuna sandwich and a caramel custard for dessert.

The 420 mile trip took us about 4 hours - including two en-route stops. Upon arrival, we decided it was time to experience a traditional Japanese Inn - rather than a modern hotel. Several were available, so we selected one based on a fanciful name - the Lotus Flower. It was located in a quiet section - and was a two story building surrounded with shrubs and flower beds. The door was painted Oriental red - and as we approached it opened and we were greeted by a woman in traditional kimono dress. She indicated we should remove our shoes - and she had slippers ready for us to use for inside wear. We were assigned a room about 12 ft. square, with a large clothes closet, and a sliding door leading to a small garden. There were two chairs but no bed visible. A small table was set with a bouquet of flowers. The scene seemed rather stark, but was clean and orderly. She indicated hanging robes, and pointed down the hall for the shower and bathing room. After indicating the dinner hour, she left us to settle in. We prepared to bathe - and padded down the hall in slippers and robe. We knew enough to know the bath was for soaking - after one has thoroughly cleaned by a shower. This we did in separate showers - then entered (eased) into the hot pool to soak. We had the pool to ourselves for a while - then another couple with two small children arrived - showered- and then smiling and bowing politely, entered the pool on the opposite side. Nudity was ignored. The water was hot - so one sat quietly while soaking. After par-boiling for about 20 minutes - we felt weak and were forced to make an exit. Fortunately, our towels were handy for a discreet American exit.

There were kimonos available for our use, so we wore them to dinner - beginning to appreciate their comfort. Everyone in the dining room was in kimono. We were entranced with the personal service, and the individual meal preparation. We had the second flask of sake with our meal. Consequently, we were satiated with food and drink - and ready for sleep. Returning to our room, we found the bed prepared - a futon on the floor. Fortunately, it was thick and quite comfortable - so we slept well.

We arose early, to join a tour that would take us to Osaka Castle in the morning - and in the afternoon to Nara and Kyoto. We traveled by bus, with a multi-lingual guide who spoke Japanese, French and English to communicate with his group. He was well organized and most informative. He carried a tall wand with a distinctive flag - so his group could identify it. This was well conceived - as other tour groups could easily be mistaken - and one could get lost. Osaka Castle was in perfect repair, even though it

was built in the 16th century by a Japanese warrior. It was built in multi-levels, and made of heavy stones - with many rooms and passageways. There were even hidden passageways behind the stone walls. One could easily imagine the intrigue that could take place - including Ninja attacks. The Castle seemed impregnable - having a high stone wall and a moat. The guide entertained us with stories of intrigue and treachery - making the visit real and enjoyable.

After lunch, our tour continued to Nara - about 15 miles from Osaka Castle - and was the first permanent capital in the year 710. We were taken to the entrance of Nara Park - so we had a long walk through the park - enjoying the encounters with the wild deer who will come for food handouts. They have a sanctuary - and consequently have become very tame. Our goal was Kofrikiji Temple, dating from the 7th century - and Kasugi Shrine, a five story pagoda, famous for its 3000 lanterns. They were beautiful - and in a picturesque setting. On our way out of the Park, we stopped briefly at Todarji Temple to view a Buddha reputed to be 53 ft. high - the largest in Japan.

We continued to Kyoto, driving on a random route to see the beautiful architecture and landscaping of its many mansions, temples, and shrines. It is reputed to have 1500 Buddhist temples. We stopped briefly at Ryoanji Temple to see the masterpiece example of a Japanese rock garden with its raked sand and rocks. It was incredibly neat and precise - and remains a vivid memory scene.

Returning from the tour, we had just time to arrive at the train station for our "Bullet Train" to return us to Tokyo. Again, it was a smooth and pleasant ride. Near sunset - there was excitement among the passengers when someone pointed out that Mt. Fuji was in view in a cloudless sky. The sun was setting - causing the snowy top to be golden - and very majestic and beautiful. It is a memory to cherish - and is my personal recollection of Mt. Fuji.

Our final day in Japan was a scheduled auto drive to Nikko - located 93 miles north of Tokyo. The drive took us through lake country with spectacular panoramas. Nikko is like a step back in time as we entered through a large Tori gate - and seeing many buildings with beautiful carvings and the dramatic vermilion lacquer finish. Famous for this is the Toshoga Shrine - and we admired its beauty. Equally attractive were Rinnoji Shrine, Futaarasan Shrine, and the elaborate Daiyuin Mausoleum - a five story pagoda. There were many other monuments that were unidentified. Most of the Japanese visitors were wearing the traditional kimono - making the scene colorful and authentic Japanese. This was probably due to the respect they have for tradition. Nikko was an experience that the Japanese call "kekko" - meaning splendid. It was a perfect description - and Wilma and I agree - our experience was "kekko".

Reluctantly, we prepared to leave Japan - as all our experiences were positive for a most enjoyable visit. It seems regrettable that we had go to war with these people with so many admirable qualities. However, I'm happy that we are on friendly terms with them today in the year 2002 - because a return visit to Japan would be highly appreciated. It is an outstanding country in the world of today.

The next leg of our "Round the World " journey was a daylight flight from Tokyo to Hong Kong on Pan Am Flight # 2. The distance was 3021 statute miles - and the Captain reported that it would take us 5 hrs. 15 minutes. Wilma and I were curious tourists - with our eyes outside to watch the take-off and the departure route from Tokyo. As it turned and followed a southwest course, we were able to see the coastline of Honshu Island and identify the location of Shikoku and Kyishu Islands of Japan. As the flight continued, we were over the East China Sea - with China out of sight to the west. The Captain announced when we were approaching overhead Taiwan - and later when overheading the Pescadores Islands. At that point, the flight turned slightly to head directly for Hong Kong. This route kept us off the China coast which was restricted territory. Arriving Hong Kong in good weather would allow us to see the famous harbor, Victoria Island, and the airport on Kowloon. I received permission from the Captain to observe the approach and landing from the cockpit - to qualify me for any future schedule I may have into Hong Kong. It is a critical airport in which to land. The landing runway extends into the harbor - so a low approach and a 90 degree turn is required to insure landing without an over-run into the bay. It was impressive to watch - and the experience was invaluable for future use - as the landing must be made on the first quarter of the runway.

The airport was a busy one - with many airlines serving the area. Airport formalities were somewhat hectic - but eventually we were cleared. We had a modest hotel in Kowloon (meaning "Nine Dragons") recommended to us - and we arrived after a short cab ride. It was in mid-city and served well for shopping, sightseeing, and close to the airport for departure. It was within walking distance for the ferry to Victoria Island - so we were pleased with our choice.

Hong Kong is outstanding for most any kind of shopping - and produced many items at bargain prices. So, after getting settled in our hotel, we were off to see the sights nearby - and discovered a shop that sold beautifully carved Hong Kong camphor chests. We had a fine one at home that was admired by all our children - and decided to buy four - one for each of our children. In addition, we bought four small jewelry chests that would fit inside the larger chest. These would be for a daughter, and three daughters-in-law. With available space, we bought a small four section folding screen with China scenes that appealed to us. All would be shipped via surface vessel to New York - with expected delivery in 90 days. We were well pleased with our purchase - and was quite sure it would be well received by our children.

We continued to explore Kowloon that afternoon - then found an excellent restaurant facing the bay of Hong Kong harbor to have our dinner. As night fell, the lights of Victoria Island, and the ships in the harbor made the area a fairyland. Hong Kong harbor is a beautiful sight - night or day.

The next day, we were off to take the ferry boat that crossed the harbor to Victoria Island. The ferry is famous for its superior service. It runs often, it was cheap, and a scenic ride par excellence. Along the way, you could see both shores with their skyline views, a polyglot of ships such as ocean cargo vessels, cruise ships, sampans with sails, and high speed catamarans en-route to Macao with tourists.

Going ashore - we were recognized as tourists - so tour vendors and bicycle rickshaws drivers vied for our business. We walked away, much to their disgust. We wanted to wander the streets slowly to see the sights. Victoria Island is a hilly land - so the streets rise from sea level to a steep level on the hill. The streets rising upward from the waterfront were often terraced - and some a steep ascent. Shops were on every street - with everything imaginable to sell. Shop owners were often on the street aggressively encouraging prospective buyers. It was a fascinating place to shop - or just sightsee. Hotels and expensive shops were on the waterfront - that we checked briefly.

We learned about the tram that ascends to "The Peak" - that is the highest point on Victoria Island. We rode it to the top, for a superb view of Hong Kong harbor. Looking the opposite direction, one could see eastern side of Victoria Island with its Aberdeen Bay, that is home to thousands of sampans and many floating restaurants. It looked interesting - so we caught a bus that took us to Aberdeen. It was a fascinating place to see with so many sampans, all connected together. People lived out their lives on the sampans - seldom going ashore. When they did go ashore - they stepped across other sampans to reach the shore. It was an interesting lifestyle to contemplate. The floating restaurants looked interesting - and we were told they served excellent meals. Somehow, we missed this opportunity to try one.

Macao was close by - and we heard enough about it to interest us. We arranged to take the high speed hydrofoil boat to Macao - to stay just for the day. It was a smooth and speedy ride. Most tourists were going to enjoy the gambling casinos - but we wanted to see the city sights. Macao was a Portuguese territory on the China mainland. It is a striking example of 16th to 18th century splendor - with cobbled streets, old mansions, and baroque churches. We had a wonderful day wandering the streets to enjoy the scene. We saw a lot of the city - and finally ended up at the harbor watching the boats in the harbor - waiting for our return ride to Kowloon.

Our last day in the Hong Kong area was spent on a bus trip to New Territories. It adjoins Kowloon, but is administered separately. It is generally farm land, with beautiful outlooks to the sea. It is adjacent to the China border - with its wire fence and unsmiling border guards to control any passage. It was a philosophic moment - to compare the Communist country that had to fence their people in. The guide told stories of the many Chinese that had died trying to reach Hong Kong. On our return, by the seashore route, we stopped briefly to see "Shatin" - home of the Ten Thousand Buddhas - for an interesting visit.

Our departure from Hong Kong (Kowloon Airport) was early evening. Again we had a beautiful view of Hong Kong harbor after take-off. The Captain reported that the flight was 1856 statute miles which would take us 3 hrs. and 25 minutes. He also informed us that the flight was southerly, remaining over the South China Sea until clear of the China border - then turn westerly to cross the Vietnam coast between Hue and Da Nang. After crossing Vietnam, the flight would cross Laos and into Thailand. Bangkok is located in western Thailand, just north of the Gulf of Siam. Due to the night flight, it was disappointing not to view the geography of the flight - as it was this area that

completed my "round the world" experience. Our only recourse was to study the map as we flew along the route - and mentally visualize the borders we were crossing and the land mass of the countries. Our flight time passed quickly - and soon the seat belt sign was on - and the aircraft descending for the landing. At touchdown, my ambition was realized - I had completed all segments of "circumnavigating the world".

Bangkok, Thailand was familiar to me, as my eastbound flight schedules from New York had brought me here many times. It is a different world from the western culture - with its colorful and fanciful architecture, and inhabited by beautiful, gentle and courteous people. Everywhere are unusual and exciting scenes - such as exotic temples, priests in saffron robes, oriental homes with wind bells, waterways (klongs) crowded with strange boats, elephants working the fields, and smiling people in different clothes. Even the scent is strange in the warm tropical air - from sweet flowers aroma, oriental cooking and polluted roadway ditches. One felt like Marco Polo - with the wonderment of it all.

My past crew lay-over stays were of short duration, so Wilma and I looked forward to a longer and more satisfying visit. We rode the crew bus to the Siam Inter-Continental Hotel (Pan Am subsidiary) - and was impressed with its ancient traditional temple shape architecture and Siamese furnishings. It was attractive and comfortable. We relaxed for a short rest, but soon were off to see the sights. We were told that there were 300 or more temples in Bangkok - each a wonder in imaginative structure. One of the most impressive and commanding to view is The Temple of the Dawn - located at the river edge - that has five towers resting on terraces supported by demons and angels. It was permissible to climb the terraces - so we did - enjoying the experience and the view of the nearby Grand Palace. Nearby was a shed containing the Royal Barge - with its Canopy for the King and places for many rowers. It is used on special holidays - and would have made a splendid sight to see.

We were up early on our second day - as we planned to take a Klong trip to the Floating Market. The tour boat was a long narrow boat with a canopy overhead to keep us out of the sun. It left from mid-city with about 12 passengers, traveling on the river for a couple miles, then veering into a smaller canal (klong). We traveled slowly, for good sightseeing - so were passed by speed boats that were long and narrow - and driven by an inboard engine driving a propeller by a long shaft. Along the way, we passed private houses that were built on stilts at the waters edge. Friendly people waved to us as they did their washing or bathing in the klong. Children frolicked in the water - taking care to avoid the speeding power boats. Soon the market became apparent when we came to an intersection jammed with small boats with people hawking their wares of all kinds. We edged up to them, and could see they were selling fruit, vegetables, flowers, cloth, carvings, snack food, leather goods, hardware and some jewelry. There were a couple hundred boats jammed together - both buyers and sellers. Our boat hung back - but several sellers came to us to try for a sale. One passenger bought an elephant carving that was quite good. The Floating Market is quite a show - and deservedly a tourist sight and a "must" for a Bangkok visitor. We returned to the city by a circuitous route that had scenic arched pedestrian bridges over the klong - and nearby small temples.

Before the afternoon sightseeing, we wanted to have lunch. Near by the Tour Boat dock was an attractive restaurant and we decided to give it a try. Knowing that Thai food could be spicy - and even very spicy hot - we settled on a grilled fish, with a curried yellow rice - that was delicious. Our dessert was tropical fruit - finger bananas and a coconut concoction that was very good.

After lunch, we walked to the nearby Royal Grounds which has a cluster of temples that had tiles that glowed golden in the sunlight. It was an impressive sight, especially with priests in saffron colored robes walking among the grounds. There were several open to visitors - and we chose first "The Temple of the Emerald Buddha" - made of transparent green jasper. We were informed that its vestments were changed three times a year by the King. Next door, was the "Temple of the Golden Buddha" - which contained a 10 ft high Buddha statue made of solid gold. It was impressive - and made one want to calculate its value at \$300 per ounce.

We noticed several people making stone rubbings of figures on the wall - at the "Temple of the Reclining Buddha". And the results were very good. They would make excellent souvenirs - and we decided to try it since materials for the rubbings were sold there at the site. We had fun, and the results were good - but not quality art. Later, we bought two fine sketches of Thai dancers that we could not resist. (They hang above our beds today.)

As we were about to leave the Palace grounds, we were attracted by the sound of oriental music and a gathering crowd. We joined them, and were just in time to see the start of a Thai dancing program. The girls were in elaborate costumes with hanging bead headdresses, and dancing slowly in time to the slow wailing cadence of the music. The girls were small in stature - young and beautiful. Their movements were graceful - using their hand and feet in expressive maneuvers. They performed as a coordinated group of twelve - and later solo performances of individuals. It was a most enjoyable program and a perfect location on the Palace grounds among the temples.

Bangkok is noted for its gemstones - and shops selling them were plentiful. Wilma and I decided that we would "just look" - and we enjoyed seeing some of the gemstones - and hearing stories about them. One can easily be captivated by the romance of jewels and Bangkok is especially known for star rubies. We bought one for Wilma as her trip souvenir - and because it is her birthstone.

Thai silk is highly prized by tourists - and the recommended shop to buy was Jim Tomson Thai Silk Company - operated by an American of that name. His fabrics are beautiful - and well worth the visit just to see the colors and patterns. I finally bought a couple ties - to add to those acquired at previous visits. Wilma loved the fabrics too, but could not see a use for such rich fabrics.

Any time we were out on the streets of Bangkok, priests with their heads shaved and wearing saffron colored robes were always in view. They often carried a bowl and cup - and we were told that the priests use them to beg their food. The begging is part of their discipline training - to learn humility. I was told that many young men in Thailand become priests for a few years for this training.

Bangkok is as unusual and fascinating a city as I have ever visited. The movie "The King and I" is a close reflection of the real Thailand scene. Consequently, it remains one of my favorite places to visit for experiencing a completely different culture. My regret is the limited time that I have spent in the country - having experienced only Bangkok - and a fascinating day train ride through teak forests to Chiang Mai, a northern capital city.

Our onward journey "around the world" must, for time reasons, continue - and from Bangkok our next landing would be New Delhi, India. It was a 2971 statute mile flight, scheduled for 5 hrs. 10 minutes. Wilma and I were pleased to accept the Captains invitation for First Class seating - when he recognized we were aboard. We got a final glimpse of the city after take-off - then were over low country before coming to the coastal boundary. The flight crossed the northern tip of the Adaman Sea, and crossed the southern tip of Burma in the vicinity of Rangoon - then over the Bay of Bengal. As we neared the India border, we could see the many mouths of the Ganges River near Calcutta - where we crossed overhead - then continued northwest just south of the Ganges River to New Delhi.

Since we had made previous visits to New Delhi and its environs, on previous working flights, we planned to transit - and continue our journey onward. We did go to the Transit Lounge to stretch our legs - examine some beautiful filigree at the Sales Counter - and enjoy a passenger tea service.

The next leg of our continuing flight was New Delhi, India to Tehran, Iran - a distance of 2683 statute miles and estimated to take 4 hrs. and 36 minutes. It was a direct flight - and would take us over very rugged land of western India, Pakistan, Afghanistan and Iran. It would be adventurous to see their way of life of the people living in those mountains, as it is very harsh and demanding land. We watched the mountainous terrain - and conjectured about such a life as it offered - but happy that we lived elsewhere. Soon a meal was being served - and our thoughts returned to the reality of our comfortable aircraft - and the excellent food we were enjoying - at 34,000 ft.

After our meal, and a relaxing short nap, I heard the power being retarded and descent was started. In about 20 minutes the seat belt sign came on, and we prepared for landing. At first there was little to see - but then the city of Tehran came into view - and we passed over the city at a low altitude. We were headed westerly - and it became obvious that we were going to land straight in on the west runway. After touchdown, we taxied and parked quite some distance from the terminal building. Passengers would be bussed to the terminal - but those who were continuing to Istanbul could choose to stay aboard. We elected to stay aboard - to avoid the bus trip and to avoid a crowded and uninteresting terminal. We had previously been to Tehran, and had no further interest in an additional sightseeing stopover. There was a crew change at Tehran, so we thanked the disembarking Captain and the Purser for their upgrade hospitality for us. He suggested we keep our First Class seats - and he would advise the new Skipper of our presence on board. Fortunately, the new crew Captain was a personal friend - and he confirmed our seating. Shortly, engines were being started for the 2103 statute mile flight to Istanbul -estimated 3 hrs. 40 minutes.

The route crossed the rugged country of western Iran (home of many Kurdish people) - then into the mountain area of eastern Turkey. Our flight continued into central Turkey and crossed overhead the capital city of Ankara - then directly to the airport west of Istanbul. As we passed the city, we had an excellent view of the Bosphorus - a narrow waterway connecting the Black Sea to the Sea of Marmara.

We planned to disembark at Istanbul, as it had been a long flight since boarding at Bangkok. We were familiar with Istanbul, but planned to revisit some of the interesting attractions of the city, as well as enjoy the comfortable facilities of the Intercontinental Istanbul hotel. As usual, we were greeted warmly by hotel personnel - and promptly were offered Turkish coffee by attractive girls wearing the traditional silk blouses and the long pantaloons. It was served in tiny cups - gracefully poured from a long spout brass pot. I accepted, as I had learned to enjoy the thick muddy-like texture. However, it does take some "getting used to it" - as it is strongly flavored coffee. Hotel Reception assigned us a room facing the Bosphorus - which gave us a fabulous view of the waterway and the boats on it. A lot of history has taken place on this strategic waterway.

We were in no mood to seek a tourist restaurant - so had our dinner at the hotel. Their dining room is excellent - and we enjoyed a Kebab meal - with Turkish music played in the background. The atmosphere could not have been better. Then, we were off for an early bed - as we planned an early sightseeing trip the next day to see the old city - with their famous mosques. We had visited them before, but they are worthy of a revisit. The biggest and the best is the Blue Mosque built in the 17th century - and is the only mosque with six minarets. It is an inspiring structure to see - and a marvel to stand inside under its large dome. The blue tiles used in construction gives it its name

Nearby is St. Sophia, noted as an architectural marvel built in the 16th century. It served first as a Christian church, later as a mosque, and now as a museum. Between the Blue Mosque and St. Sophia is an ancient hippodrome - a race course built in 203 that overlooks the Sea of Marmara. Nearby is the Topkapi Palace of the Ottoman Turkish Sultans. It too, has become a museum - holding priceless Chinese porcelain, Arabic and Greek manuscripts, robes of the Sultans, jewelry of the treasury, including an 88 carat diamond, plus emeralds and peacock blood rubies. Topkapi was a new experience - so we enjoyed learning of its history and seeing the historic treasures. The drive across the "Golden Horn" waterway to the new city and return to our our hotel is always a fascinating bustle of activity of boats, cars and people to observe. It would have been interesting to stop for awhile and watch, but our time was limited to prepare for our onward flight departure for the Pan Am flight # 2 to London.

At the airport, and boarding the flight, we rejoined the crew that we had been with previously - and had taken their crew rest in Tehran. Our reunion was cordial and we were immediately invited to seats in the First Class section. The privilege was appreciated - and we thanked them for their consideration. Our flight to London made an en-route stop at Frankfurt, Germany - which was a distance of 1864 statute miles and an estimated time of 3 hrs. 15 minutes. The route was over western Turkey, Bulgaria, Yugoslavia, Austria and Germany. The route was familiar to me - so Wilma and I

enjoyed trying to locate the cities of Belgrade, Vienna and Munich that would be close to our route along the way. We had visited them on previous trips - and it was fun to recall the memories of being there. With a lunch served along the way, the flight time passed quickly - and soon we were starting our descent for a landing at Frankfurt.

Our transit time at Frankfurt was to be one hour, and we disembarked to stretch our legs and hopefully see some old friends among the Pan Am personnel. I had first come to Frankfurt 29 years before - and had made many flights into there since. I was intimately familiar with the city - having walked its streets, strolled along the river, and eaten many typical German meals with its superb beer. It brought good memories to be there again.

Soon, the flight was being called and we boarded for the flight to London. The distance was 644 statute miles and would take only 1 hour and 10 minutes to reach. It was a quick and uneventful flight - and soon we were descending over the English Channel and on final approach to Heathrow Airport.

London is another familiar stop in the 29 years of flying into the European area. But, it is always a pleasure to come again - for the British congeniality and good humor - and the many interests of London. The crew layover hotel was within a mile of the airport - and we decided to stay there also. The rate was very good - and would be convenient for next days departure for New York. After freshening up, we decided to go downtown to the Picadilly area to see a movie. After selecting one and checking the next performance - we found we had just time enough for dinner first. Fortunately, one of our favorite restaurants named "The Dover Sole" was nearby. Our meal was fabulous - and what else but Dover Sole. It was cooked to perfection - and large enough to completely cover our dinner plate. I remember the dinner well - but the movie title has slipped my memory.

Returning to the hotel, we had time for a long restful sleep before our call for the final flight to New York. We joined the crew on the bus that would be operating the Pan Am Flight 101 - for the short ride to the London terminal. We decided to take this flight since it arrived New York at a earlier and more convenient hour for us. It was a Boeing 747 aircraft that would fly non-stop to New York - a distance of 5587 statute miles and was forecast to take 9 hrs. 30 minutes. Again, we were invited to occupy seats in the First Class section - and we gratefully accepted. (The Captain was a personal friend.)

After departure - we flew westward until I could see the Bristol Channel north of Wales - then continuing to cross St. Georges Channel to Cork on the southern tip of Ireland. Then, we were over the Atlantic Ocean - starting our long crossing - with little to see except ocean and the rare ship at sea. We were served a meal that we leisurely enjoyed - even accepting the Champagne to celebrate our final journey. Then, they offered a movie, which we watched to completion. Then, I relaxed to nap - while Wilma read a book. I awoke as a PA announcement advised that we were passing Boston and starting descent. We landed on Kennedy Airport on runway 280 where we had departed 24 days before. We had "circumnavigated the world" - and the statistics were : 10 flights - for a total distance of 29,700 statute miles - in a total flight time of 51 hours and 12 minutes - within 24 days. We felt privileged - and grateful to Pan Am who made it possible.

Wilma remembers her private 747 flight - Tokyo to Honolulu.

My wife Wilma, had been enjoying flights to the principal cities of Europe, and visits to middle east and oriental cities, on my "Round the World" flights. When the opportunity came in the Spring 1974, for temporary basing in Honolulu, to fly Charters to Tokyo, I decided to bid on it. It was a great opportunity for us to see the Pacific part of the world, and we were happy when I was awarded the assignment.

We both flew as passengers on a Pan Am flight to San Francisco - then on to Los Angeles on a domestic Airline. We stayed overnight in Los Angeles - and then I would command the flight Los Angeles to Honolulu. The flight was a very pleasant one, taking 4 1/2 hours in perfect flying conditions at 35,000 ft. (I remembered the flying boat days - 18 1/2 hours at 10,000 ft. Big changes had taken place in 30 years.) Arriving at Oahu island, I enjoyed seeing Diamond Head, Waikiki Beach, and finally Pearl Harbor. I indicated them to the passengers, knowing that Wilma would want to see them too. In the flying boat days, I could pick my route to show passengers the sights. Now, with modern efficiency, we were directed to the most direct pattern for a landing at the Honolulu airport.

Wilma rode the crew bus with me - traveling through the city of Honolulu - out to the suburb of Waikiki. Our hotel was located a couple blocks from the beach - and not as romantic a setting as the old Moana right on the beach. However, it was well located near parks and shopping areas with restaurants - where we could explore, shop, and have a meal. We could walk to the beach front of nearby hotels - and a bus stop nearby that would transport us to any desired location. It would be ideal for Wilma - when I left for my flights to Tokyo.

My charter flight Honolulu to Tokyo was a Japanese charter with all Japanese passengers. Apparently, the Hawaiian Islands are a prime vacation choice for them - and they are coming in increasing numbers every year. The flight was smooth and uneventful - with fewer weather challenges than on the Atlantic Ocean crossings. The view approaching the island - and to the airport were new and interesting. The Japanese Air Traffic Control was excellent - both in the English language and the precise directions. This same efficiency was evident on the ground instructions, and in the handling of passengers in the terminal. The more I worked with them, the higher my admiration. We had an overnight in the hotel, and then reported for our return to Honolulu.

I was surprised to find that our return flight to Honolulu was classified a "ferry flight" - as we would have no passengers. When I inquired, "Why?" - the answer was that the Japanese government doesn't allow it. The reason was that they have a national airline - and the Japanese must use it for flights originating in Japan. So, we ferried back to Honolulu.

I made two more flights to Tokyo - each with minimum time at Tokyo for crew rest. The hotel served excellent meals - and I especially liked the buffet breakfast - serving everything one would want. They had a shop that sold Japanese products - and I found presents for grandchildren. On one of the departures, I was thrilled to see Mt. Fuji - shortly after take-off. Too bad - I had no passengers to show it to.

On my final charter flight Honolulu to Tokyo - I found that there was space available on the plane - so I suggested Wilma come along for the ride and a short exposure to Tokyo. She was pleased to accept - as it would be a new adventure.

After our arrival Tokyo - and checked into the hotel - we did go to the Ginza district to sightsee and to have a meal. But, our tourist time was limited, so we returned to the hotel to visit the Shop. Wilma had been wanting binoculars - and we found just the right one she wanted for bird watching - at just the right price.

Our sightseeing in Tokyo was very limited, but fortunately we had memories of a previous visit - when we were in Japan for 10 days. Our return flight to Honolulu was again a ferry flight - so Wilma would be our only passenger. I decided that she should ride in the cockpit for take-off and landing - for personal safety in case of an emergency and because it was a great opportunity to do so. She was very happy at the arrangement, so she could observe the cockpit crew at work and to observe the take-off and landing from a new perspective. I think she remembers the experience well.

After the take-off, she went down into the cabin, and felt a spirit of loneliness, being alone in such a cavernous cabin area. She wanted to be helpful, and brought coffee and juices to the cockpit crew. But, at mealtime, she became a passenger - and was served her meal by the Captain himself. That was a first. Wilma enjoyed her unique flight - and refers to it as, "The private 747 she rode Tokyo to Honolulu as the only passenger". That is having it as good as the President of the United States - a private 747 - at least for a short while.

Pan Am's generous travel policy was utilized, by our son Scott, on Spring Break, for a somewhat frivolous trip. When he heard that a small Chinese table screen, that I had ordered, was waiting to be delivered in Hong Kong, he volunteered to go to Hong Kong and get it for me. Then, he talked his mother into going with him. So, the two of them went to Kennedy Airport to make the flight to Hong Kong - but returned, because they could not get seating on that flight. They considered going eastbound around the world to Hong Kong - but finally decided that was impractical. Originally, they would have had only 60 hours in Hong Kong - now, if they went, it would only be 36 hours - and wondered if it was worth the effort. After talking it over, they decided to go - and left to try again at the airport.

(Now it is their story - as I heard it.)

Success - space was available - and they joined the boarding passengers. Soon, they were airborne and flying northwest, to make an en-route stop at Fairbanks, Alaska. They had a short transit - and were soon over the Pacific - en-route to Tokyo. Again, a normal transit - but Scott reported he enjoyed seeing the international mix of people and the atmosphere of the Terminal. Then, they were off into the air again - watching for the coast line of China. Finally, they came to the fabulous harbor at Hong Kong. As the plane flew over the area, they could identify Victoria Island, and the ferry boats plying back and forth on the water. They flew low over Kowloon, and turned right onto the path to the runway, that was on a peninsula extending into the bay. Their arrival was on time, so they had just 36 hours before embarking for the return flight to New York.

Wilma found the hotel in Kowloon, where we had stayed previously - that was close to the shop where they would pick up the table screen. When Wilma identified herself - the shop keeper remembered her and produced the screen, with an apology for failing to send it with chests we had ordered for the children. Now, that the mission of getting the screen was accomplished - now they could spend their time sightseeing.

Wilma and Scott had limited time for sightseeing, but their report made it sound productive. They said they had lunch in Kowloon and wandered the shops, and then took the ferry boat to Victoria. They reported exploring the hilly streets of Victoria, with all the small but interesting Chinese shops. They took the tram to The Peak, where they could get a view of the harbor. They even found time to join a dinner cruise boat around Victoria Island to the east side, to view the sampans and the floating restaurants.

Their 36 hours went quickly - but they managed to accomplish a lot. Soon, they were again at the terminal - ready for their return flight. They reported little about the flight, except it followed the same route as coming over. They did say, "they rested a lot while they were on board - as they did not get much rest in Hong Kong". On arrival at New York, Scott continued onward to St. Louis, MO - to insure being ready for the start of classes. Wilma came home, tired but successful in bringing the Chinese screen. She came home with jet lag - and needed a few days to recover. Later, we asked Scott what his classmates thought of his Hong Kong Spring vacation. His reply was, "I didn't tell them - because they would not have believed me."

I recall the many years of my service with Pan Am, of missing a number of holidays at home, due to being junior in seniority and was assigned a flight trip. Consequently, I can remember a few Christmas's celebrated some time between Dec. 18 and Jan. 3rd - because I was "gone flying". Later, as my seniority increased, I was able to bid and insure being home for "special events" with the family. Later, after our children had flown the nest, and had families of their own, Wilma and I decided to bid for trips on some of these holidays - so the junior seniority pilot could be home with his family. This was not entirely a generous spirit - as we often planned something special for ourselves. Consequently, Wilma and I can fondly remember - theatre in London - an Easter in Paris - Thanksgiving in Scotland -and a most interesting New Year Eve in Beirut. These have added to our memories - and I hope the junior pilot enjoyed his family at home. It definitely was a Win-Win situation.

I did not know it - but this was to be an eventful day in my flight career. It all started out normally enough. I left home early enough to arrive the airport two hours before my scheduled flight departure. It was required to check in only one hour before departure - but I learned that an early arrival allowed me to read my mail, correct my route manual, and to have a cup of coffee with the Dispatcher and learn of any late Scuttlebutt. At one hour before departure, I met with my Flight Service crew - and briefed them on any unusual aspects of the flight. Then, I signed my "dispatch papers" - had a meteorology briefing - and was in the cockpit 30 minutes before "Start Up". With the First Officer and the Engineer present - we read our "Check Lists" to prepare the aircraft for starting. It also allowed a possible review of our departure procedure - and were ready with 10 minutes to spare.

All had gone well with flight preparations - I heard the passenger door close 5 minutes before scheduled departure. We started engines - and signaled for a push back exactly on schedule. Upon request, the tower cleared us to runway 30 L - the one closest to the bay and flying seagulls. After arriving at the take-off position - and warning the Flight Service about an eminent take-off - we waited for the tower clearance. When it came - I applied power - released the brakes - and accelerated rapidly to V 1 and was

approaching V 2 (165 mph) when I was aware of a seagull crossing our runway path. In the few seconds I had to observe the bird, I could estimate we were on a collision course. As the First Officer called V 2 - I pulled back on the yoke to raise the nose and lift the aircraft off the runway, I saw the seagull disappear under the nose of the plane - and hoped we'd miss it. Just as the plane lifted into the air, we heard a muffled explosion - and a shudder of the airplane. The engineer called out, "We've lost # 4 engine" - and I commanded, "Shut down # 4 engine" which he proceeded to do. The tower called, "Clipper, do you have an emergency?" I was busy flying the heavy aircraft on three engines - so the First Officer reported that we had shut down # 4 engine. The tower responded that he was holding the runway for an emergency landing - and did we have any requests. He further reported that, "# 4 engine had shot a 100 ft. stream of fire behind it shortly after take-off."

The 747 aircraft was performing well on 3 engines - there was no fire on # 4 engine - so we climbed to 2000 ft - and discussed our situation. Our cockpit crew agreed that we probably hit the seagull and it was ingested into the engine. The engineer had cut off the engine fuel so quickly, no fire had developed. We were flying well on three engines - there was no need for an emergency landing. But, we were too heavy for a normal landing - due to the possibility of a hard landing putting a permanent set in the wings to damage it. Consequently, we all agreed that dumping fuel to lighten the aircraft did not appear to be hazardous - so I ordered to prepare for it. We advised the tower of our intentions - and to give us an assigned area to dump over the nearby ocean. I advised the passenger of our probable bird strike - and the necessity of returning to Kennedy Airport at New York. I also advised them about our plan to dump fuel - and the "No Smoking" sign that will soon come on. We expected to be dumping fuel for 14 minutes. Flight Service reported that the passengers reacted well

The fuel dumping went "according to the book" and in 14 minutes we dumped about 120,000 lbs. of fuel - and were down to a normal maximum landing weight. We were ready for landing - and the tower cleared us to do so. Flying on 3 engines was no problem - and was a practiced maneuver on our six months check flights. But, I was especially vigilant due to our heavy weight. The touchdown was a "greased one" - that would not cause a wing problem - and we taxied to the terminal. A large group of mechanics and engineers waited us - to inspect the engine. As we drew closer, I saw pointing and excitement among them - so something must be unusual. I hurried to join them and see our damaged engine. Incredibly, the entire center of the engine had exploded - blowing out the entire engine in small pieces that were scattered into the wing and flaps - and some even penetrated the fuselage. The engine was a complete ruin - and would be given attention by the FAA and the Manufacturer (Pratt & Whitney). Later, I was told that the damage was the most extensive they had ever seen - all caused by a 12 # bird. But, as one of the mechanics said, "I'll bet he won't have the guts to try that again."

It was an expensive incident - the loss of a \$250,000 engine - dumping 120,000 lbs. of fuel - a delayed flight - and crew pay for 1 hour & 20 minutes of flight time. I complimented the crew for their excellent response to an emergency - and sent letters to their department head. The Chief Pilot complimented me on a job well done - and added - "as always". That made my day.

Hijacking of aircraft was becoming more and more prevalent in the '70s and 80's. As I recall, at first it happened for mostly political reasons. And, it did not appear to be directed by any group - but more by individuals or small few - trying to escape a country. Sometimes, there seemed to be a political statement that was directed to the world - about oppressive treatment by a dictator or his regime. Then, in more recent times, hijacking took a more ominous turn by terrorist elements - as retaliation for actual or presumed hostile actions by country.

Pan Am had it's share of hijackings in earlier days - by Cuban refugees coming to America - or individuals wanting to return to Cuba. Those hijackings were inconvenient, but not life threatening - and pilots were encouraged to accede to demands - just don't endanger the passengers. Later, the hijackers were more punitive. Pan Am had a plane hijacked at Paris - and after wandering around Europe - finally landed at Cairo, Egypt. When negotiations were not productive for the hijackers - they left - but blew up the aircraft that had been wired for bombs, killing some passengers still aboard.

Another Pan Am plane was hijacked on the ground at Rome. Again, negotiations failed, and the hijackers started killing passengers. Only later, did the Captain discover that his wife was one of the victims. The Captain became a bitter man - and ever after carried a pistol in his briefcase - saying it would never happen to him again. (The pistol possession was illegal in New York - but the Captain ignored the law.)

Another hijacking on a Pan Am plane occurred on the ground in Viet Nam - when a student with a knife - threatened passengers, if the Captain did not fly into North Viet Nam. The Captain, obtained a weapon from a military Courier aboard, confronted the student and shot him dead on board the plane. Then, he threw the body off the plane onto the ground. (He was highly criticized for this action by the US liberal press - but the FAA commended him for it - and he was presented a medal.)

Pan Am suffered adverse publicity, when terrorists placed a bomb aboard the luggage of a Pan Am flight destined -London to New York. It blew up over Lockerbie, Scotland - killing many people on the plane and on the ground. That terrorist plot contributed to the demise of Pan American within a few years.

As an active Captain, I was concerned about the safety of my aircraft, for which I was responsible. I was part of a group to suggest making a weapon available to the Captain - as a final line of defense. This was always blocked by New York City law concerning the carrying of weapons - so it never became a viable deterrent for me. But, I felt strongly, that any hijacker should be denied entry to the cockpit - because of the possible destruction of the plane and it's passengers. But later, the hijackers came aboard as a coordinated group - and with weapons - and could not be denied possession of the plane. As of this date, the only defense the aircraft has - is to deny weapons to any passenger - and to install a cockpit door that is impenetrable. The final line of defense - a weapon in the cockpit - has not been resolved, although it is being reconsidered.

Perhaps it has no particular significance, but it gave me a sense of satisfaction nevertheless. Twice I had the satisfaction of being cleared for descent from 35,000 ft - retarding the power - and never adjusting it again until on the ground at JFK airport in New York. The first happened from over Boston - and the second - over Albany, N.Y. It happened in light traffic - so ATC could give direct clearances. By timing the flap and gear extensions, with the distance to go - it can happen. Satisfaction? You bet.

1975 - '76 - B-747 & RETIREMENT

During my flight career with Pan Am, I had passed up several opportunities for temporary overseas assignment - because we did not want to interfere with the children's educational progress. In the Fall of 1975, another opportunity was available - a 3 month assignment in Sydney, Australia. The flights out of Sydney were to American Samoa - and to Fiji. Wilma and I agreed that it sounded interesting - and the last opportunity before my retirement in May 1976. I bid - and with my seniority - was awarded the bid. We were going to Australia. And, I was reminded of my longing for travel, when I was in college, and singing the popular song, "I Want To See Some Mo'a Of Samoa". Finally, the dream will become a reality - after 37 years.

The Sydney Assignment was attractive. I would receive my 747 base pay, plus \$700 incentive pay, plus a free apartment, and a free car for the three months I was there. My flight schedule would be a weekly flight - Sydney to American Samoa & return - or Sydney to Fiji & return. (Later, I learned that when we flew from Sydney to Samoa - a Pacific crew in Samoa would take the flight onward to Honolulu. After, we had our rest in Samoa - we would be scheduled to return to Sydney (deadhead) on Qantas Airline. Then, after five days, deadhead back to Samoa, to operate the Pan Am flight to Sydney. The reason was economics - it was cheaper than scheduling a five day layover in Samoa - according to the pilot contract.) However, if a pilot chose not to deadhead to Sydney and back - Pan Am would pay all expenses for hotel & meals at Samoa. That sounded attractive - and Wilma and I planned to take advantage of it. The same arrangement prevailed at Fiji also. It would be equivalent to a paid vacation.

Wilma and I left New York - deadheading on a Pan Am flight to Los Angeles. We spent overnight in L.A. - continuing the next day Los Angeles to Honolulu - and onward to Fiji - and continuing to Sydney. It was a long flight, totaling 7700 miles on the 3 leg journey - that crossed the International Date line. We did get some fitful sleep en-route but with past Pacific flights remembered- and the anticipation of our new adventure, I was mostly awake. Finally, we arrived the Sydney area - where I asked the Captain if I could observe the landing from the cockpit - for future familiarity.

At the airport, we were met by Pan Am personnel, who were very considerate and helpful in clearing Immigrations and Customs. Then, we were shown our car, telling us that they would lead us to our apartment, for ease of finding it. The airport was south of the city of Sydney, and our apartment was north of the city. En-route to the north section, we crossed the famous Bay Bridge that looked down on the Sydney Opera House - of such unusual design.

Our apartment house had basement parking - and an elevator to take us to our 7th floor apartment. It was luxurious - with white carpet, & gold finish bath fixtures. It had two bedrooms, two baths, large living room & attached dining room - and a balcony overlooking a large bay of water. Wilma and I could not have been more pleased. (Later, I learned this was given to the most senior pilot - and that privilege was mine - after 35 1/2 years.)

I was given three days to relax and get acquainted with our new home and neighborhood. It was essentially residential - so it was quiet. A shopping area was located within walking distance - and would serve our normal need of groceries, wine, and personal items we might want. We planned to eat most of our meals at the

apartment, except when we were out for the day sightseeing, or when gone traveling.

We learned the local address of other pilots, and flight engineers on temporary assignment, and found that they were all from the Pacific Division of San Francisco. (I learned later, that I was viewed with suspicion by the Pacific Division cockpit crews, because they thought I might be there as a spy, to report on their operating procedures. A few months prior to this, there had been an accident by a Pan Am flight at Samoa, and some of the Pacific operating procedures had been questioned at the FAA hearing. When I learned of their suspicions of being a spy, I assured them that it was not so, although a little amused at the thought. Personally, I did observe that, in my opinion, the Pacific pilots were not as sharp on instrument procedures as the New York pilots. And, the reason was - that they flew in better weather on the Pacific routes, with less demand for proficiency - and consequently did not get the experience.)

After a three day settling in period, I was scheduled out for a flight to Samoa. Since I was on my first flight, Wilma did not accompany me, but stayed in Sydney to shop and get oriented to the city. I always enjoy a new flight - learning the departure routine and seeing the departure geography. After take-off, the Sydney harbor was interesting to study - with it's narrow entrance from the sea, and then opening wide for the 20 miles inland to the city. (As some one said, "All the fleets of the world, could be moored in Sydney Bay." We soon left the east coast of Australia behind, but we had a check point of Norfolk Island located approximately 600 miles seaward on our route. (Norfolk Island - is where the distinctive Norfolk Pine trees were first discovered by early seamen.) After overheding Norfolk Island, there is little to look for except atolls that are scattered along the route. They are very colorful, with the white coral sand and lacy surf, in a background of deep blue sea. Most of these are just north of the Tonga series of small islands, but were not in view for us. It was a flight in beautiful Pacific weather - and after 3 hours and 15 minutes, we were ready to start descent. My excitement was growing - and the college years song, "I Want To See Som'a Of Samoa" was running through my mind. Today - I was finally going to see Samoa - at last.

Even though the weather was excellent, I planned to make a simulated instrument approach to the airport for familiarity. There was a hazard on the approach to the runway, of a hill that must be cleared, before starting the final descent to the runway. The hill had a radio beacon on it, to insure being past it before descending below it's height level. All went well on my approach, the hill was observed right in line with the runway, and then I realized that further descent could not be delayed, or one would be too high over the runway. So, the practice approach was definitely informative. We landed at Pago Pago airport - beautifully situated on the south shore of the island. There was blue sky, blue ocean with a white lace surf, palm trees, and Samoans in traditional sarong dress. This was equal to or exceeded my dreams - and like the song said, "I want to see som'a of Samoa".

The drive to our hotel was very scenic - with visions of lagoons, palm trees, and flowering shrubs along the way. Our hotel was built of wood and stone - perfect for this tropical scene. It was built on the shore of a large bay that originated from the sea, several miles away - and extended a couple miles further to the town of Pago Pago.

A road followed the south shore of the bay to the town, and around the end to the north shore. It ended a mile or so further at a Tuna Canning Factory. The town of Pago Pago seemed low key, with little auto traffic, quiet shops, and many churches. When Wilma joins me, we shall enjoy exploring and getting acquainted.

After three days in Samoa, our flight from San Francisco arrived. That Pacific crew would rest, while we took their plane onward to Sydney - and when it returned, they would return to their home base in San Francisco. That system gave the most economical use of available crew time. Our take-off from Samoa was at night, but dawn arose about the time we arrived over Norfolk Island. Daylight gave us a good view of the eastern Australia coast and the entry to Sydney harbor. We flew the 20 mile length of the bay, to give the passengers a great view of the city and the Opera House right on the shore. Then we turned left to land in a southerly direction at the airport.

Wilma had been notified of my expected arrival, so she was waiting when I arrived "home". Apartment living was still new and interesting - to park in the basement and take an elevator to a 7th floor apartment. Wilma and I had lots to tell one another - as we had lunch on the balcony overlooking the bay - with the sail boats. She reported that she had gotten well acquainted with our neighborhood - and had even rode the bus to where she could ride a ferry boat to the city - and other interesting places like the zoo, or to the ocean beaches some distance away.

With a car, there was lot to do in Sydney and it's environs. But, for city trips, we usually rode the bus to the ferry, and took that to the city, landing within 300 ft. of the Opera. It was an impressive structure, and world famous, resembling a group of sailing ships, with jib and mainsails wind filled. Being located at water's edge of the bay, it was a perfect location to be appreciated, especially when there were sailing ships in the bay background. We promised ourselves an attendance at a performance before we left my assignment in Sydney.

My next flight out was to Nadi, Fiji. It was a 1969 mile flight northeast - crossing Middleton Reef at 350 miles off the Australia coast. The next check point was just south of Noumea, New Caledonia - that is 1100 miles off the Australia coast. Then, it's open sea to Nadi, Fiji. The airport was located right on the western coast of the island, with no obstacles for a routine landing. Again, as we approached, my mind went back 30 years during the war, when I flew a PBM - U.S. Navy flying boat into Suva Bay on the south coast. Aviation has come a long way in 30 years. Our landing at Nadi was routine. The Station Manager met me - to ask a favor. He said that several wives of Pacific pilots, temporarily based in Sydney, were stranded due lack of space on the Pan Am flight. They had come to shop and relax - and now wanted to return to Sydney. His request was, "Would it be all right to seat them in the lounge behind the cockpit?" I readily agreed - as there was no legal reason why they could not occupy those seats. They are available, but not normally sold to fare paying passengers. Later, the ladies expressed their thanks.

The hotel was located in a park-like grove of trees - with multi-sections of bedrooms - with a separate central Reception, lounge, and dining room. The walk between bedrooms and the central public rooms was like a garden of tropical flowers.

It was not only beautiful, but made quiet atmosphere for the bedrooms. It was unusual, and one of the best arrangements for a hotel that I have ever seen.

I had a two day layover to relax and to get acquainted with the area for future sightseeing and entertainment. After a great breakfast, in a large open room next to a garden, I set out to explore. Nearby, was a marina, where I learned about a 5 day cruise, called "The Blue Lagoon Cruise". It was a small vessel that went to some offshore islands where there were native villages. It sounded great - and I hoped Wilma and I could go before my assignment ended.

To the south of the hotel, reached by hotel transport, was another marina that featured a day sailing cruise. It went to a nearby island for a day outing, or a longer stay if you were a guest in their hotel. That, too, looked like a good outing when Wilma came with me. Fiji offered a lot for tourist interest, and I looked forward to my return.

When I reported for the return flight to Sydney, I met the stranded Pan Am pilot wives, who were appreciative of my willingness to let them ride in the upper lounge. Apparently, my New York "spy" status made them question my willingness to cooperate. Our return to Sydney with a super full passenger load was smooth and uneventful. The "wives" were met by their Pan Am pilot husbands - and I was thanked again.

Time between trips gave us lots of opportunity to be a "tourist" in Australia. We decided to go to the beach for the day. En-route, we found several bypass roads leading to scenic outlooks onto Sydney Bay. When we reached the ocean, we found that they had a designated beach for swimming, because it had a shark barrier to protect swimmers. After hearing a few shark stories, we were quite content to swim behind the barrier. That coast is famous for the number of sharks off shore. After the swim, we drove north along the ocean drive for about 40 miles, and found a small city where we had lunch. We learned that it had a small but excellent zoo of native animals. It was excellent - and we learned about Australian wild dogs, Kangaroos, Wambats, and the cute Kualas - often called Kuala bears - but they are not bears at all.

After the Zoo, we discovered a primary river about 50 miles north of Sydney. They had a cruise up and back on the river - and we decided to take it. It was a scenic trip, and a great history lesson. We learned that the river was prominent in the history of the white man's settlement in Australia. Every few miles, we listened to fascinating stories of early trials of the settlers trying to get established. It proved to be a thoroughly enjoyable cruise. We arrived back late afternoon, and had a long drive to Sydney - but Wilma and I judged it a great day.

I am scheduled to fly again to Fiji - and this time Wilma will accompany me. When we arrived the hotel, she liked the outlying bedrooms for the quiet and the attractive gardens surrounding them. We had decided on the day cruise to the offshore island - so I had the hotel call for a reservation that was confirmed for the next day. We arose early to enjoy the fabulous breakfast in the garden dining room - where I enjoyed papaya, omelet and mixed tropical fruit. Then, the hotel transported us to the marina. Our ship was a sailing vessel, that was beautiful and sailed well. We were entertained by native musicians on the way out to the island. We sailed for nearly two hours, and came to a delightful island, with native built structures with palm thatch roofs. We were scheduled to stay 5 hours - giving us time to swim - have lunch and

a stroll about the island. The swim was in perfect water for snorkeling - and we enjoyed watching the colorful fish. Our choice for lunch was a delicate fish that was delicious. And, I ordered my favorite dessert - caramel custard. After lunch, we discovered the natives selling Puka beads - a tiny shell with a natural hole for stringing them. Naturally, we had to have a memento for Wilma - and she prizes it. Our return on the sailing ship, carried passengers considerably more red-skinned than when we went out. We were entertained again by the natives who played and sang for us. The tropical juices and cookies were welcome when served. It was a happy group of passengers who disembarked. Some were missing - as they planned to stay for a week on the island. I envied them - as it could be a quiet, restful, and peaceful reverie. Our hotel transport picked us up to return to the hotel.

That night, the hotel planned entertainment for the guests. It was going to be a native sing-fest shortly after dinner. It was a group of about 30 dressed in colorful sarongs - both men and women. That was a memorable night, performed in the garden, with torch flares for light - and some of the most melodious voices one could imagine. They performed for an hour - and we did not want the performance to end. They had tapes to sell - allowing us to relive that beautiful evening.

The next day, Wilma and I walked to the nearby marina to learn more about the Blue Lagoon Cruise - and to get dates of the sailings. It was something we really wanted to do - and I'll try to bid my flight schedule to try to arrange it. After another day of relaxation at the hotel, it was time to return to Sydney. Wilma and I agreed we would look forward to another visit to Fiji.

My next flight was to Samoa with the long layover time - and this time Wilma would go with me. I had indicated that I would remain in Samoa - rather than a deadhead return to Sydney. The flight, Sydney to Samoa was smooth and uneventful - and I pointed out Norfolk Island and the Atolls along the way for the passengers benefit. After arrival, Wilma joined me on the crew bus for transport to the hotel. She was a tourist and exclaimed at every scenic sight along the way. She loved the hotel and it's scenic site on the edge of the bay - with the mountain backdrop rising beyond the bay. It was a South Pacific paradise - and we would have five days to enjoy it.

Wilma and I relaxed the first day by swimming at the hotel beach on the bay. The snorkeling was fabulous, with many colorful fish coming close to see us. We noticed that many people wore beach shoes into the water - and upon inquiry learned about "stone fish". They are a very poisonous fish with spines - that give one a painful wound if stepped upon - and are even life threatening. They look like a stone - and are inactive - so they are easy to inadvertently step on. From then on, we watched carefully where we stepped - and snorkeled with our feet elevated.

After lunch at the hotel, Wilma and I walked the 1 1/2 mile to Pago Pago (pronounced Pango Pango). Along the way, we passed a Presbyterian Church, where the choir was practicing. The voices were deep and melodic, and we agreed to attend a service on Sunday. The center of Pago Pago was not much - except it was like a movie set - all quiet and serene. However, when a cruise ship comes, I'm told it gets more lively. We walked around the bay end to the Tuna factory - and were invited to come inside to view the operation. We were told that it was located here to provide work for the Samoans - but the plan did not work out. The U.S. government welfare program

was so generous - few people felt the necessity to take a job. So, the factory had to recruit workers from other islands to come in to work. The canning process was fascinating to watch - and when I eat tuna - I remember Samoa.

Wilma and I were ready to go sightseeing. We arranged for a rental car so we could eventually see the entire island. Since the hotel was near the center of the island, we chose to travel east to start our tour. It was the only road, so we did not have to make a choice. It was a narrow blacktop road, that meandered through beautiful country with palm trees, flowering frangipani trees, and flowering shrubbery. Located among them were small native settlements of grass huts - with tapa cloth hanging here and there. The men wore shorts and T shirts - and the women wore muumuus of a colorful material. We passed a school with the children outside looking very attractive in uniforms. The boys wore shorts with white shirts - and the girls wore short blue skirts and white blouses. They were very clean and tidy - and very friendly to we strangers passing by.

We reached the end of the island within about 20 miles & close to noon - and found a beautiful grove of coconut trees facing the beach where we would have our lunch. We had brought a lunch from the hotel - plus some candy bars for emergencies. We settled under the shade of the palm trees to eat, and soon found that we had an audience of 8-10 children gathering about us to watch. We offered to share our food, but they shyly shook their heads - No. But, when we offered the candy bars - they relented and accepted - since M&M's were just too much to resist. They thanked us very nicely. They stayed - and we had fun asking - and answering questions of one another. They wanted to know where we lived, what kind of house we had, did we own a car, how many children we had, and did they go to school and for how many years? And, we wanted to know somewhat the same about them - how many brothers and sisters they had, what did their parents do for work, and what did they want to do as adults? The comparisons of our life styles was interesting. What would be the ideal existence? (Later, I'll tell you about an interesting couple that we encountered, who had lived both kind of lives.) After our entertaining lunch, we walked down to the shore to see a fishing boat that had just landed. They had a catch of 12-15 nice sized fish that they indicated would supply several families. The scene at the beach was picture perfect - with an endless ocean under a blue sky. Samoa is a small isolated island in the big Pacific ocean - but we found a happy contented people.

After our beach lunch and short walk, we drove onward on the road that rounded the island onto the north side. There, we found another village, and the road stopped, as there were steep mountain sides that discouraged further road building. The native village was the same open side huts with the palm roofs. There were about 20 huts - and a larger central structure where they assemble for tribal ceremonies. We did not meet the Chief - but learned there was one - and with a council ruled the lives of the people. The village was near the beach - so we walked to where a boat was just arriving. It had two men who had been fishing - and successfully - as a nice catch lay on the bottom of the boat. When we admired them, a man offered to sell us one. We did not buy, but it put us in the mood for fish for dinner. We returned to our hotel over the same beautiful road - waving back to the friendly waving children. We did have a red snapper dinner that night on a torch lit terrace - overlooking the Pago Pago bay. Wilma and I were glad we were here.

We kept our car, and planned a trip to the western end of the island. After an excellent breakfast on the Terrace, that included a bounty of tropical fruit that I love, we were ready to depart. Going through the lobby, I replenished our emergency candy supply - in case we found more children. We drove to the west, and shortly came to another native village. As I parked to observe and take some pictures, a young woman came out to greet us - and offered to show us around. She spoke excellent English - and was very relaxed with strangers. We accepted her offer - and saw a typical home, with minimal accommodations inside, and learned that cooking was done on an open fire outside. She told us that children are a communal responsibility, and looked after by whoever are closest. We were shown a large open structure - that was the meeting place of the elders, who made the rules to live by and judged the transgressors. It was a very informative tour that Wilma and I enjoyed. I tried to tip her for the tour, but she refused it. However, she did have tapa cloth for sale - and we bought a piece as a souvenir.

We drove onward to the west - and came to a road that led south toward the sea, and we decided to follow it. It was a narrow road that was paved a short distance, then it was dirt and led to a narrow promontory with steep sides and no way to turn around. So, we continued, as the view to the sea was enticing. We were high up on the hill, with a fabulous view above the shoreline. I was getting concerned about a turn around, but figured we could always back out - if necessary. Now, the view was absolutely breathtaking and getting better, so I continued because the road went onward. Finally, we saw an end to the road - and a single dwelling. I drove to the end, and found a minimal area to turn about - by several back and forwards. As I was doing so, a woman came out of the house - and I stopped to explain my presence. My apology for intruding was ignored - and she invited us to stop and visit. We accepted - and was ushered into an open lanai with an incomparable view. The house site was on a narrow spine of a hill - with both sides dropping off steeply to the sea. One could see the shore - and islands just offshore - with white surf surrounding the scene. Fabulous - and I commented on the beauty that they enjoyed. Then, she told us the following story.

She and her husband were native Samoans, who had left the island 30 years before to live in Los Angeles. Apparently, they had followed successful careers - and were comfortable financially. Recently, her husband had become ill, so they decided to return to Samoa for his health. (At that moment, her husband was resting in the bedroom, and she did not want to disturb him.) She continued, - the land they were living on was tribal land, formerly occupied by her family, so she was entitled to reclaim it and build a house. They had been back in Samoa for six months. Upon our inquiry of how they managed in so remote a place - she explained the following. They have a garden, chickens and a pig - plus some fruit trees (papaya, mango, banana and coconut). They fish often, although it is a hard descent to the beach and harder to climb back. When they need store goods, they walk the 6 miles round trip. They hope to buy a car within a month or so - when it becomes available. She seemed happy and serene - and reported that her husband was lowly improving.

She wanted to know about us - and why we were in Samoa - and appeared to be keenly interested in our reply. Wilma and I told her about our family - my career - and how I always wanted to come to Samoa. We talked for more than an hour - and then felt it was time to go. I offered to drive her to the store, but she said they had just returned.

The Samoan lady walked with us to our car, and in that short time, I felt as comfortable as with an old friend. We thanked her for our visit, and were saying our good-bys, when she sincerely issued a wonderful invitation - that has hauntingly stayed with me. She said, "If you ever have a troubled time in your life - remember this place and return to us. You may stay as long as you need". We sincerely thanked her. Later, we reflected upon such a generous and kind offer to someone she had so recently met. Wilma and I remember her with awe and admiration - as our culture is much more conservative and reserved. I could wish them nothing but the best. (In an attempt to keep these fragile strings of communication, I wrote two letters - but never had a reply. I always wished we could have met again.)

After leaving our Samoan friend on the narrow promontory, Wilma and I had lots of philosophy to talk about - as we continued west on a road that gradually descended to the sea. We found a cluster of houses near the shore - located to look out on a beautiful scenic beach with the usual coconut palms. Offshore were a number of small islands that protruded high out of the sea. One was seemingly just one big rock - but somehow a coconut had found sustenance enough to produce a single coconut tree. Again, we had reached the end of the road - obviously blocked by sheer rock cliffs - making a further road impossible. We retraced our route back to the hotel - reviewing our adventurous day.

That night, the hotel had informed us was a special dinner - a Samoan barbecue served on the Terrace. When we arrived, a band was playing, flares had been lit for lighting, and people obviously enjoying the tropical setting. A local drink was being served that was delicious - and probably accounted for the convivial atmosphere. I think it was rum, pineapple and coconut juice. After a couple drinks we were ready for the meal. From a buffet, we selected the meat that we wanted, and the chef would cook it over a grill. When the meat was ready, it was served with rice, and condiments of peanuts, coconut, raisins, papaya and pineapple. Willie and I thoroughly enjoyed the dinner - especially when they served my favorite dessert - custard, fruit tray & coffee. What a great day it had been

We had the car for the third day - and this time we would travel northwest on the only road left unexplored. It led into town - then climbed up into the hills behind the town. We stopped to look back at the scene of town, bay, and high hills beyond - for an inspiring view. Samoa is one of the beauty spots on the earth. We continued on the road to a pass - and then downward to a plain - with a visible sea basin with boats. It was a Shangri - La type of protected valley, lush with growing fields. We could see a settlement - and when we drew closer - could see a soccer field, and learned it was a boys school. We stopped by - and were invited to look around - and enjoy a tour of the facilities.

We drove to the bay area - and decided to walk the shore. Shortly, we had to climb to higher ground until we were high above the bay. The scene below was one of tranquility - with the bay to our right, and the endless sea to our left. It was such a pleasant spot, we stayed to have our lunch and rest - then reluctantly returned to our car. We stopped in town on our return - at a tea room that overlooked the bay. We returned to the hotel for a enjoyable snorkel swim at the beach - but mindful of the stone fish. Wilma and I particularly remember these swims at the hotel beach. as "special".

Our Sunday in Pago Pago was one of quiet tranquility. Auto traffic was almost nil - as people were walking to the several churches on the road to town. We had already planned to attend the Presbyterian Church, located on the bay, only about a half mile from the hotel. We enjoyed a pleasant walk along the bay, joining many other pedestrians, on this Sunday morning. We arrived the Church just as the bell was ringing, and was surprised to see that the "bell" was a truck wheel rim hanging from a tree limb, with a section cut out, and being struck by a steel rod. The sound was very melodious - and equal to a real bell.

The Church was a plain interior of natural wood and white plaster - with traditional pews. We were welcomed into a pew by smiling natives. The people wore a combination of clothes, but generally the men wore shorts or trousers and light shirts - while the women wore the traditional muumuus dresses. The service followed traditional liturgy, but we were impressed by the quality of the singing - with their deep and melodious tones. It was a very moving experience - and conducted with religious conviction. After the service, we were greeted by many of the congregation in a very friendly manner - and went away in a spirit of awe and admiration.

That afternoon a cruise ship arrived and tied up within a block of our hotel. It was a smaller ship, so the number of passengers was limited. But, it was enough to change the serene atmosphere of our area - and in Pago Pago. I really liked it when it was quieter. We spent the rest of the day at our hotel beach, watching the colorful small fish - and watching out for stone fish. (We have a thing about those stone fish.)

Time to return to Sydney. The flight came in from San Francisco - and we continued it on to Sydney. This time the load was lighter - and I had Wilma upgraded to First Class. She reported the dinner and champagne were excellent. When we arrived at our apartment, it felt like we were arriving home. Our stay this time would extend through Christmas - and we were curious about how the Australians celebrated. We found it was very low key, compared to the shopping and decorating of an American Christmas. Our preparation too, took on a very relaxed approach. Wilma was eager to prepare a leg of lamb dinner - as we had been seeing them at the butcher store. We shopped for presents to exchange - and Wilma picked her own at a jewelry store. It was a chain - with a green stone shaped like Australia on it that she particularly admired. We bought some Australian music tapes - with typical Aussie music. We found a Christmas song about, "Six White Boomers" bringing Santas sleigh with toys - that we enjoyed. (Boomers are Kangaroos) It was fun and we played it often.

We received letters and cards from our children - and we missed the family spirit of a traditional gathering. But, we hoped they were creating their own family traditions. Robb and Patricia arranged a special delivery of "Flowers" which surprised and pleased us. On Christmas Day - we thought about family who were so far away - and we missed them. But, sentiment was offset by our Australian Adventure - which we were enjoying. Christmas dinner was a partial disappointment. Wilma loves lamb and can cook it to perfection. But, the Aussies do not cure their meat - and as a consequence the lamb was not the traditional taste - but a pungent fresh taste - not to our liking. Apparently, that is the way the Aussies like it - and we are in their country, so we do not criticize. I did have double portions of mince meat pie - with hard sauce. As for leg of lamb, Wilma says we'll wait for American lamb before she cooks another.

We had planned, and now we would make a driving trip to the country south of Sydney - just to get acquainted. The New South Wales countryside was attractive, with gently rolling fields, that were pasture or growing crops. One field that we enjoyed seeing was one filled with sunflowers - all pointing their faces our way. It was a picture - and I did take it. Our destination was Canberra, the capital of Australia. We knew that it was a new city - having recently been allocated land for a capital - then announcing a world competition for a design for a capital. The winning design was won by an American architect - which intrigued us. As one entered the city, one would be impressed with the new buildings of unusual design, and the wide avenues that served the city. There was a special area of embassies - whose individual structures reflected that typical of their own country. It was fun just to ride around - and enjoy a mini "round the world" adventure. We were told not to miss the War Memorial - and it lived up to it's reputation for interesting displays, with adequate descriptions to relive the war event. It was beautifully situated on a hill, that gave an excellent view of the city. We found a quiet hotel - and stayed for the night in Canberra.

The next day found us traveling further south, and gradually getting into rising country. We were headed for the Snowy Mountain region, with the principal mountain being Mt. Kosciusco that was over 7000 ft. high. It was December - but there was no snow - because we were in the southern hemisphere and going into spring. But, when we came to the winter sports town of Thredbrae, we enjoyed seeing the town and it's shops. The ski lift was operating, so we decided to ride it to see the mountain, it's slopes, and scenic outlooks. The scenic views were impressive, but what intrigued us most was the extensive fields of wild flowers. It was a very enjoyable experience to walk among them - in a natural garden paradise. We sat and just enjoyed the scene for over an hour. We overnighted in Thredbrae - enjoying the young people that seemed to live there.

From the Snowy Mountain region, we turned east to drive to the coast. We found extensive beach areas with apparently few people enjoying them. We were headed north along a coastal road - so we had frequent outlooks to the sea. We became quite excited when we came to a field with wild kangaroos. Later, we were to learn they are considered a pest that wrecks the farmers crops - consequently they are considered vermin and can be shot. Not being a farmer, that made me sad.

Approaching a valley, opening to the sea, with high hills on each side, we were excited to see a number of sailplanes in the air. Our road passed near by, so we turned off to watch the action. We could park nearby where they were launching - and landing - so we could do some close observation. We were told the hill was 700 ft. high - with steep sloping side down to the sea. An off shore breeze was blowing making it ideal to launch into the air. As we watched, the pilot would only take a dozen steps before he was flying out toward the sea - then turning back to ride the ascending air along the hills ridge. Staying in that rising air off the hill allowed then to climb - or ride up and down the ocean shoreline. Sometimes they would come close to buzz the hill spectators - and yell to one another at close range. Some attempted to rise to high altitude - and cross the valley to pick up winds on the hills on the other side. We saw a few fail to make it - and being forced to land in the valley. But, they would be trucked back to the launch site - and go into the air again. Some fliers would take-off and return back to the same site. It was a most enjoyable few hours watching them - and admiring. I was sure that I could do that - but a 700 ft. hill was no place to learn. It was time to return to Sydney.

Our daughter-in-law, Patricia Lusk Evans, advised that her mother was coming to Sydney on an Australia tour. Consequently, I sent my flight schedule on the dates I expected to be in Fiji - hoping we could meet her there. Happily, it worked out according to plan - and she arranged her flight for that date. Wilma came with me on that Fiji flight, so she was there also to greet Grace Lusk when the flight came in. I would be Captain on the continuing flight to Sydney. So, I went to operations to check my flight plan and sign departure papers - while they enjoyed their reunion in the lounge. I was pleased to learn that there was space in First Class - and arranged to have them upgraded for the flight to Sydney. (Captains privilege) We had the usual excellent weather for the flight - and as I approached Sydney maneuvered to give the passengers a good view of the beautiful Sydney harbor and the city. Wilma and Grace commented on it later - as good orientation for them.

Grace Lusk would be our guest for several days before joining her Australia tour. We planned several outings of tourist interest, as we were quite familiar with Sydney and it's environs by now. We rode the ferry boat to the Zoo to see Australia animals - and another time to the city for sightseeing. Our ferry boat landed a short way from the Opera - so we went to view it close at hand. On impulse, we decided to check if tickets were available. Success - we could go tomorrow. It was the opera "Cosi Fan Tutte" that Grace was pleased to report that she was familiar - and it could not have been a better choice. It was for an afternoon performance, which suited us just fine. When we arrived the next day, we were early enough to enjoy a tour of the Opera House. The interior was just as dramatic as the exterior - creating a most unusual atmosphere - with excellent acoustics. We all enjoyed the opera - and one that Grace particularly enjoyed - and reported she was so pleased to be there.

Grace wanted so much to see the Blue Mts - and that suited us as we had not gone there yet. We had a beautiful drive up into the mountains located northwest of Sydney. We were there in a few hours - and drove to the Canyon rim - at which point one could see the blue haze that gives the area it's name. Apparently, the trees emit a pollen that has a blue cast to it. We walked out to an area where we could see three large rock formations - known as the "Three Sisters". Then, we walked to the place where cable cars would take us to the canyon floor. We found that it was thickly grown on the floor area - and could accommodate most any wild animal. After a short walk in the jungle, we returned to our cable car to ride back to the canyon rim. There we sought out the restaurant - and enjoyed a lunch while overlooking the view of the canyon with the blue haze.

We wanted Grace to see the famous beaches of Australia - so we drove to the coast to find one known for surfing. We enjoyed watching the action - which was only modest as the waves were not the best that day. But, it was beautiful to see - and to have the familiar recollection. A drive north produced some beautiful outlooks to the sea - and we found a restaurant that had a most scenic view to the beach and surf. It had been a beautiful and relaxing day - and all agreed - it was perfect.

Grace had to leave to join her planned tour of Australia - that would take her to the Great Barrier Reef and on to the north coast. We had a wonderful time together - and later, we enjoyed recalling our adventure.

When Wilma and I spent 5 days in American Samoa the month before, we had learned about a flight to Western Samoa. I now had the same long layover trip, with the opportunity to visit, and was anxious to do so. When we arrived Samoa from Sydney, I was able to make arrangements for the Western Samoa flight for the next day. It made two round trips daily - and we reserved for the morning flight. It was a small 10 passenger propeller aircraft - that took about an hour. It flew at a low level, so we could enjoy the view - lots of ocean. Western Samoa was a smaller island than American Samoa - and was a protectorate of Australia. After landing, we detected the British influence in speech and dress - and discipline. I found it admirable. Our hotel was close by the airport - and part of a residential area - without many shops. The hotel was fairly old, and old fashioned - and reminded me of scenes from old South Pacific movies. In fact, I believe some scenes were shot of the hotel for a movie. It had a low ceiling reception area - and a near by dining room and a shop. To reach our room, we had to cross a large outdoor lounge and garden area. Our room was fairly large and comfortable, and looked out on a jungle scene of bushes and trees. It was not air-conditioned, but did have an overhead fan.

We explored near the hotel that afternoon - and arranged for a car tour for the next day. When we went to the dining room that evening, we found about 20 other guests. The dinner was seafood that was outstandingly good - and a caramel custard for dessert. It could not have been better. Coffee was served in the garden lounge. As we left the dining room, we saw a stalk of bananas hanging there. Upon inquiry, we were told it was for the guests to help themselves to take to their rooms.

We had a good nights sleep - and awoke ready for our tour. The hotel served us a full breakfast with bacon and eggs - and a generous helping of my favorite fruit - papayas. The hotel prepared lunches for us to take along on our tour - knowing there would be no other source for food. Our guide was a very attractive young Samoan lady. She spoke excellent English, and we soon learned that she was a student at Washington State University. At this time, she was on vacation between semesters. Her parents lived on a remote small island off this main island - and apparently under native standards in a grass hut.

Our tour would cross the hills, en-route to the other side of the island. At a scenic site, we stopped at a residence identified as the former home of Robert Louis Stevenson. Supposedly, he did much of his writings at this home. It was a modest house - but modern and comfortable. It had a magnificent view toward the sea.

We stopped at a native village along the way - and our guide explained more about their way of life. Their lives were governed by a Chief - but tribal rules and policy were determined by a group of elders. The people lived off the land by raising plantains, bananas, poi, sweet potatoes, fish, chicken and pork. They had little need for store goods.

We found a beautiful coconut grove - with a close by beach - where we had our lunch. As usual, we soon had a group of children join us - but they were very respectful with our guide present. We shared our lunch with the children - and afterward had fun playing a ball game. Our guide told us more about her life - and her experiences at college. She was not sure of her future, but thought she would return home to teach - or possibly become a tour director. When we expressed interest in native life, she invited us to visit her parents on the nearby island. What an experience that would be - but unfortunately, it was not an opportune time. I've often thought - an opportunity lost.

On the third day in Western Samoa, we returned via the Island Service prop plane to American Samoa to be available for my return flight to Sydney. That gave us a day to wait at the hotel - which we enjoyed at the beach - snorkeling. Our Pan Am flight came in on schedule - and we enjoyed an uneventful flight to Sydney. (This Pacific weather is a pure pleasure to fly in.) On arrival at Sydney, we were informed that the plane would continue to Melbourne - and it would be appreciated if I would command the flight. Apparently, Pan Am Sydney had been unable to locate a relief pilot.. I agreed, and had them make out a ticket for Wilma to go along. It was a short flight - and along the way we could locate Snowy Mts and the little town of Threadbrae. We did not see much of Melbourne - except between airport and hotel - but it was clean and attractive. The hotel was comfortable and the dinner excellent - and Wilma said she was glad to have come along. There was nothing outstanding in our experience at Melbourne, except the bragging rights of saying - "We've been there". Just off the coast of Melbourne is the island of Tasmania. It was my wish to go there, and I would not have passed up an opportunity - but it just did not happen. (Tasmania is quite a remote place, but I knew of a Stewardess based in New York who lived there - and frequently commuted to New York to take her flights. That is about as distant as one could get from a job.)

We did not have many out of country visitors at Sydney - but Pan Am acquaintance called to say he and his wife were in town - and would like to say hello. He was a hunter - and had shot game in Africa and other places in the world. Now, he was in Australia to shoot kangaroos - for a friend who had a farm and wanted to rid it of the kangaroo pests. I did not envy him - as I liked the interesting creatures. We invited them to overnight with us. Willie prepared a spaghetti dinner - but she had to cook it twice. The first platter of spaghetti and tomato sauce was spilled onto that beautiful white carpet. We cleaned it up immediately, but that portion of carpet always retained a slightly pink cast - if you looked closely. Some days are better than others.

We were starting our third and final month of my assignment at Sydney. I had bid the long layover at Fiji - because we wanted to take the five day cruise we had investigated , called the "Blue Lagoon Cruise". It was a 4 1/2 day cruise on a small ship that carried only 50 passengers. It traveled to a group of small islands located about 50 miles off the Fiji coast to the northwest - where natives lived a long time traditional life.

My flight left Sydney on schedule - and we arrived Fiji the night before the Cruise departure at noon the next day. The dock was close by, and the next morning a hotel car delivered us well before departure. We were shown our cabin, on the outside of the upper deck - which pleased us very much. After settling in, we joined the 40 or so passengers assembling in the Lounge for the Captain's briefing. He informed us - "this was an informal cruise, so shorts were acceptable at all times. We would be visiting several islands with native living the same manner for hundreds of years - except that they no longer fought and ate their enemies. They have also adopted lately the use of outboard engines on their fishing canoes - for speed and safety. When we reach the native villages, they will be invited to come aboard to entertain us with songs and dance. Some of their dances will require partners - and if you are invited to dance - please do not refuse as it will be considered an insult to them. He further suggested that this would be an unusual cruise - with new experiences - so please enjoy."

There was no dockside fanfare at our departure, but the passengers were excited and lined the rails to observe our harbor exit. The sea was very calm, so we enjoyed a comfortable and relaxed cruise. Our passengers were congenial, and happy to socialize to get acquainted. The mix of retired persons and those much younger was about even, but all were interested in the cruise itinerary. By evening, we were anchored in a protected bay, and were served an excellent dinner (informal). We retired early- and slept well after the tasty rum punches.

After breakfast the next morning, we cruised among the islands, seeing villages on the shore as we passed by. By noon, we were anchored again, and it was announced that after lunch, we would be transported to a small island for snorkeling and cave exploring. We spent about three hours on the island - swimming through coral openings to caves within - that were strange and mysterious and fun to explore. After the caves, we swam outside among large coral rocks that sheltered thousands of colorful fish. We never tired of letting the fish come out to investigate - then clapping our hands to see them dart back to safety. Wilma and I agreed, it was the best snorkeling waters we had ever experienced - for clarity of water, the number of fish, and the interesting atmosphere.

It was announced that after dinner, the local tribe had been invited to come aboard for entertainment. They arrived in their own large canoes - about 20 persons in all - the women in bright muumuus or hula skirts and wearing flowers in their hair. The Chief was an imposing figure about 6 ft. 4 in., wearing shorts and a animal skin over his shoulder half covering his chest. He also wore a shell necklace that was his badge of office. All were barefoot. They assembled in a group to play rhythm instruments - and sing in deep melodious voices. They sang hula type music while some of the women danced in a beautiful interpretive performance. Then, they announced community dancing - inviting the ships passengers to dance with them. At that point, the Chief made straight for Wilma inviting her to dance. She was a good sport and accepted. I had my camera ready - and got several good shots of the performance. Then, I too, was invited to dance -by a big 250 lb. woman who bounced around with me - to the native rhythm beat. It was fun - and she laughed uproariously - at my dancing or that we were enjoying the dance. Most everyone got into the act - and we cut an interesting action picture. But, everyone enjoyed the fun - and Wilma and I remember it still.

The next day, we were invited to visit the native village where the performers lived. They were very hospitable - showed us their homes - and talked of their way of life. It was basic, with few amenities, as we know them. There was no electricity - and food preparation was over an open fire. They ate lots of fish, pork, chicken, manioc, coconut, guava and bananas. Before we left the village, we were directed to a line of sellers who had craft items to sell. There was some buying, but we found little except puka beads to buy. We would have liked to buy more, but the crafts were dismally unattractive. Probably, they do not have much of a market, to encourage better products.

We cruised among the islands the next day - going ashore to visit another village on one of the islands. Apparently, the men in the village were aggressive fishermen. They showed us their boat, a large canoe-like boat with an outboard engine. They go well out to sea for the fish, estimated at 20 miles, and are vulnerable to storms. That is why they use the outboard engine- to run to safety. Before the engines, they lost boats fairly regularly - and they still do occasionally, even with the engines. When we question them about the accidents - they shrug and say - "that is the way it is."

Our final day - and everyone seemed sorry to have it end. We had experienced another way of life - in one of the beauty spots on the earth. The natural setting of these islands - surrounded by a pleasant seascape - made one want to extend the pleasure. The pace of the islanders life, made one assess his own, and wonder about adjusting to a different concept. Perhaps a Pacific island life would pale in time, but for the moment we had the pleasure and privilege of observing another culture and their accepted way of life.

We returned to the main island of Fiji - and thanked the Captain and crew for their excellent cruise. Being close to our hotel, we returned easily by mid-afternoon. We were overheard by some tourists as we extolled the virtues of our cruise - and I believe we influenced some potential customers. And, why not, I'd go again in a minute.

We returned to Sydney, and realized that our 3 month assignment was coming to an end. Before we left, we wanted to buy an opal for Wilma, since Australia produced some of the worlds best. We had been looking, and now was the time to buy. We went to downtown Sydney to a recommended dealer- and found an opal that pleased us. We learned that there are many qualities of opals and fakes also - so we were pleased to have found a reputable dealer to educate us.

I made one more flight to Fiji and one more to Samoa - and my Pacific assignment was finished. If we could have stayed longer, there was much more that we could do. But, Wilma and I were satisfied that we had enjoyed a wonderful Australia Adventure - and it was time to go home. We packed up our mementos to take home - records and tapes of Aussie music, opal jewelry, tapa cloth, and carvings - to remind us of an enjoyable three months. We did regret leaving our very enjoyable apartment - and will probably be the only time to experience such living. We needed to get home - as my retirement was only three months off. So, we closed our apartment door - and drove to the airport to fly back to New York. Good-bys were said to the Pan Am personnel of Sydney for all their consideration and kindness - and they returned the compliment. We had worked well together.

Returning to New York - and to our home in Connecticut - it was a pleasure to be back - and being with our family again. But, before long, I was being contacted by Scheduling to depart March 7th for a trip to New Delhi - via Rome, Istanbul, and Tehran. As the flight progressed, I realized that it was enjoyable to be back flying a section of the world that was familiar to me. Compared to the Pacific routes with its good weather and limited landings, I found that the Atlantic Division routes more challenging and interesting. The cultures of people we meet are more varied - with national traits to identify the English, French, German, Middle East countries with Arabs, Indians and various Orientals - making our social and professional contacts interesting to relate to them. And, I too, must have demonstrated traits, since I seldom was recognized by anyone other than American - or possibly Canadian. To relate to - and to deal with these cultures is a interesting challenge. These were some of my thoughts as I returned to Atlantic Division flight schedules. I was glad to be back on familiar territory.

Returning from the New Delhi flight - was scheduled for a Rome flight and another to Frankfurt to end my March schedule. On each, I was conscious of it being that much closer to retirement - and possibly my last flight here at this place.

My April 1976 flight schedule was a near repeat of March. I would again make a trip to New Delhi - where the monsoon clouds were building for the summer rains. Later, they will build with the seasonal heat to make impressive thunderstorms. A whimsical thought occurred - that with retirement, I will not be around to contend with them. The New Delhi flight was uneventful - and I returned to New York on schedule. Another Frankfurt trip - to enjoy bratwurst and beer on the layover - and the April schedule was complete. For the May 1976 schedule bid (my final one), I bid a day trip to Bermuda, and a final flight to Tehran. It was a light flight schedule, but my bank hours would be added for full pay for the month. My Tehran flight was scheduled for departure May 19th - giving a comfortable margin of returning May 25th - or six days before my birthday of May 31st - when I reached age 60. (U.S. Government law states that age 60 is the limit for pilots to fly jet aircraft commercially.) It has happened to some Pan Am pilots, by some schedule irregularity, to still be overseas on their 60th birthday - and had to be deadheaded home to comply with the Federal Law. (Some pilots take issue with the law - saying it is age discrimination. I do not share this opinion - and feel some date is needed - and age 60 is a good compromise.) Personally, I welcomed my retirement.

Wilma and I had moved to our summer address at Oven Point Camp in mid-May, in preparation for our summer occupancy. We planned to drive together to Kennedy Airport the morning of May 19th, as she would accompany me on my final flight. Unexpectedly, when I awoke that morning, I found that 18 inches of snow had fallen during the night. I was a little dismayed, but I hoped our four wheel drive vehicle could cope with the 1/2 mile drive to a town road. But, when I went to the garage to check the vehicle, the scene up the camp hill road was a disaster. Many trees were down across the roadway - and the awful thought came to me - that I might miss my final flight. Time was a factor also - as it was a six hour drive to New York. Fortunately, I had a snowmobile and a chain saw - and I went to work to clear the road. Most of the trees were small - and had fallen because they could not support the heavy snow load. I cut and dragged the trees enough to clear the road. When I finished, I counted 15 trees that had been pulled aside to clear the roadway. With the road cleared of trees, could the "Jimmy" climb that hill with that deep snow? We would soon find out.

Wilma and I packed our baggage, locked the cabin, and optimistically warmed up the "Jimmy" for it's challenge on the snowy hill. It did not falter at all - but steadily climbed over the crest and on to the flat road to our gate. There, we found the road plowed - and for the first time that morning, I relaxed. Checking my watch, we had ample time to make my flight departure time - and I realized that missing my flight was not going to happen. As Wilma and I traveled toward New York, we had a laugh about the possibility that didn't happen - but earlier that morning - I would not have bet on it.

When I reported for my flight, word in Pan Am must have been spread, as "well wishers" greeted me, at every department - and I was touched by their sincerity. I did not have to exercise Captain privilege with Wilma - Pan Am had already issued her a First Class ticket. She, too, received lots of attention from the Flight Service crew - and even reported nice things they said about me as a Captain.

We enjoyed our layover stops at London, Istanbul and Tehran on the outbound flight. We tried to do and see favorite places - and to eat favorite traditional foods at the restaurants - not knowing when we might return. Finally, we were back in London,

where the final leg of my final flight would begin. When I arrive at the Dispatch Office, I was handed a congratulatory wire from the Chief Pilot. Dispatchers were very cordial with their wishes for a happy retired life. London supplied a photographer to take official pictures of Wilma and me - and they had gift packages of fruit basket, flowers, and bottles of Champagne for us. Finally, the ceremonies were over, and we could carry on with the mundane job of flying an airplane to New York. Soon, I was making my final take-off at London - and within a few hours - my career would end.

The passengers were very nice when Flight Service informed them of my pending retirement - and wrote notes of congratulations. The crew wrote messages on the First Class menu - and signed it for me. I was presented with a route map - showing my final flight - and signed by the crew. Finally, I was approaching New York - and cleared to the Kennedy tower. Upon making radio contact, the tower cleared me to land - but added congratulatory remarks about my retirement and final landing. With that, several other flights in the air, broke in to add their messages of good will. Now, I was on final approach to Runway 4 - and determined to make a feather smooth touch-down. It was not a "greaser", but pretty good for one nearly 60 years old - and not allowed to fly jets anymore.

After reaching the terminal, I was informed that I was to meet the Chief Pilot for final termination. When I arrived with Wilma, the room was full of Pan Am pilots and other friends in Pan Am. We drank a retirement toast - and several friends made nice remarks. At retirement, I had reached # 4 in seniority among all Pan Am pilots. I was ready to pass the number on - and Captain Abrahamson was there to receive it - and thank me. I was retired - and I could now look forward to the next phase of my life. However, from August 13, 1940 to May 31, 1976, I enjoyed my Pan American experience from the first day to the last. I was grateful for nearly 36 years of steady pay checks, the finest aircraft, and high quality personnel to work with. Pan Am was acknowledged the premier airline in the world - and I was happy to have had a part in that achievement.

WILMA & CAPTAIN EVANS - "Final Command Flight - London to N.Y." (1976)



A BIT OF FLIGHT REMINICING

During my aviation career travel, I was aware of the privilege of seeing and meeting many cultures of people in the world. Our differences in language, dress, customs, and architecture has always been a fascinating subject, and consequently, reported in various media. Therefore, there is no need for me to report it, except as I related in "An Aviation Career".

However, as I flew the world routes, another benefit has been the sight of natural phenomena, that I would like to share. Over 38 years of flying, I have been thrilled to see:

- A. The geography of much of the world seen from above 30,000 ft., such as -
 - 1. Extensive coastlines of continents.
 - 2. Islands of the Caribbean - Mediterranean - Pacific
 - 3. Isthmus of Panama
 - 4. Entire atolls in the Pacific Ocean
 - 5. The Bosphorus - connecting the Black Sea to Sea of Mamara
 - 6. The Rocky Mts. - Swiss Alps - Mts. of Afganistan
 - 7. Mts. of Tibet including Mt. Everest
 - 8. Mt. Fuji
 - 9. Entire cities and environs
 - 10. Entire Grand Canyon & Colorado River
 - 11. Curvature of the Earth at 45,000 ft.

- B. Individual natural phenomena of the world, such as -
 - 1. Unusual sunrises & sunsets plus moonrises & moonsets
 - 2. Horizon to horizon thunderstorms
 - 3. Upside down lightning - striking up rather than down
 - 4. Fantastic northern lights
 - 5. Overhead an erupting volcano
 - 6. Glaciers collapsing into the sea - sometimes birthing an iceberg
 - 7. Flight into the eye of a Pacific typhoon
 - 8. Flight overhead the eye of an Atlantic hurricane
 - 9. Flight through dust storms - middle east
 - 10. Flight near water spouts & tornado dust spirals
 - 11. Flight alongside Icebergs
 - 12. Static electricity lighting up the props & wing tips in the night sky
 - 13. Lightning strikes on the aircraft - estimated 25 times
 - 14. Flight at high northern latitudes - making the sun rise in the west

ADDENDA - INDEX

- A. Family Facts - Robert C. Evans**
- B. Aviation Compensation**
- C. Principal Pan Am Flights - Family**
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Addendum - A Family Facts - Robert C. Evans

Robert C. Evans - D.O.B. - 5/31/16 @ Evansville, Indiana

Parents: Jesse Weaver Evans - D.O.B. - 1892 @ Palestine, Illinois
Ada Mary Rawlings - D.O.B. - 1890 @ Loogootee, Indiana

Siblings: Walter - D.O.B. - 1911 (deceased)
Lester - D.O.B. - 1913 (deceased)
* Robert - D.O.B. - 1916
Norma - D.O.B. - 1921
Jesse - D.O.B. - 1923 (deceased)

Robert married - 6/12/39 @ Eat Lansing, Michigan
To: Wilma Jean Acker - D.O.B. - 7/15/18 of Muskegon, Michigan.

		Present
Children: Robert Jr. - D.O.B. - 6/9/41	@ Coral Gables, FL.	- Yes
Thomas - " - 7/27/43	@ " " "	- No
Gail - " - 2/15/47	@ Mt. Kisco, NY	- Yes
Scott - " - 1/27/51	@ " " "	- No

Grandchildren:

Robert Jr. married Patricia Lusk - children: Matthew & Daniel.

Thomas married Cynthia Faigle - children: Elizabeth & David.

Gail married Thomas Young - children: Brian & Eric & Carrie

Scott married Susan Swicegood - children: Luke & Jesse & Margaret &
Kathryn

8 - AVIATION COMPENSATION

<u>YEARS</u>	<u>AIRCRAFT</u>	<u>STATUS</u>	<u>COMPENSATION</u>
1938 - '39	PT-3/BT -9/A -17	Cadet - Air Corps	\$300 / yr.
1939 - '40	P-36 / P-37	2 nd Lt. - Air Corps	\$3010 / yr.
1940 - '41	Sikorky S - 40 " S - 42	Pan Am - Copilot	\$2400 / yr.
1941 - '42	Boeing - 314 Martin - 130	Pan Am - Copilot	\$3000 / yr.
1942 - '44	Commodore Sikorsky S - 42 " S - 43	Pan Am Captain	\$7200 / yr.
1944 - '45	Boeing - 314 PBM (Navy) PB2Y3 (Navy) C - 54 (Air Corps)	Pan Am Captain " " "	\$12,000 / yr. " " "
1945 - '46	Douglas DC - 4	Pan Am Captain	\$14,000 / yr.
1947 - '52	Constellation	Pan Am Captain	\$18,000 / yr.
1952 - '55	Douglas DC - 6	Pan Am Captain	\$25,000 / yr.
1955 - '59	Douglas DC - 7	Pan Am Captain	\$35,000 / yr. *
1960 - '69	Boeing - 707 (Jet)	Pan Am Captain	\$50,000 / yr. *
1970 - '76	Boeing - 747 (Jet)	Pan Am Captain	\$76,000 / yr. * (\$83,000Max.)

*Minimum guarantee for 70 hours. Overtime was compensated up to 75 hours - with the excess hours credited into "Bank Hours". These "Bank Hours" were used whenever the month flying time was less than 75 hours - for pay purposes.

(C)

PRINCIPAL PAN AM FLIGHTS - FAMILY

<u>YEAR</u>	<u>FLIGHT DESTINATION</u>	<u>REMARKS</u>
1954	New York - Prestwick, Scotland	Family - 3 months
1957	New York Puerto Rico	Family - 1 week
1960	New York - Argentina (Not PAA)	Tom - AFS
1959	New York - Rome via Paris	Family - Christmas
1962	New York - Frankfurt	R & T Europe -VW
1964	New York - Round the World	Robb
1964	New York - Copenhagen	Gail - (Lisbet)
1965	New York - Ceylon	Tom - Fulbright Sch.
1965	New York - Ceylon (Visit Tom)	Robert-Wilma-Scott
1966	Ceylon - Eastbound - New York	Tom -Ret. Ful. Sch.
1967	New York - Lisbon, Portugal	Family exc.Robb
1968	New York - London	Gail & Scott - Europe
1969	New York - Bermuda	Scott (in cockpit)
1969	New York - New Zealand (Tom via Tahiti)	Wilma -Tom -Gail
1972	New York - Hong Kong	Wilma & Scott
1973	New York - Round the World	Wilma & Robert
1975	New York - Sydney, Australia	Wilma & Robert
1976	New York - Rome (Clip. Pioneer Reunion)	Wilma & Robert
1977	New York - New Zealand (Retired)	Wilma & Robert

D.



Office of the
Senior Vice President
Flight Operations

May 11, 1976

Captain R. C. Evans
204A Heritage Village
Southbury, CT 06488

Dear Bob:

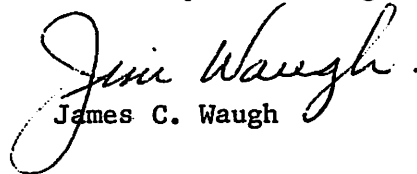
Having just been apprised of your forthcoming retirement, I was reminded once again of your splendid contributions to Pan Am throughout an enviable flying career. Both personally and as a professional airman, you have been an example and inspiration to all of us, and I am sure that I speak on behalf of many of your brother airmen in wishing you a retirement equally fulfilling.

Your retirement is a double loss to me in my current assignment. A fine, dedicated airman is leaving our corporate ranks and I shall miss our continued professional association.

On behalf of our brother airmen, many of who have benefited from your expertise, the corporation and personally, may I extend our thanks and gratitude.

Please extend my gratitude to Wilma for her support and understanding during your long term of distinguished service.

Warmest personal regards,

A handwritten signature in cursive script that reads "Jim Waugh".
James C. Waugh

D.
204 A Heritage Vlg.
Southbury, Conn. 06488
May 1, 1976

Capt./Mr. J.C. Vaughn
Senior Vice Pres. - Operations
Pan American World Airways
New York, New York

Dear Jim,

May 31, 1976 rapidly approaches and then my status in Pan Am will change from "Active Pilot" to "Retired Pilot". Like finishing a good book, I will be reluctant to see my career end. But, like the "good novel", it has been a great source of satisfaction to have enjoyed it so much. For that reason, I would like to say "Thank you" for this opportunity to have had a career with Pan American World Airways.

I joined Pan Am Aug. 13, 1940 - and the growth since that date has been extensive. On May 31, 1976 I will have completed nearly 36 years of employment. The two years prior to that were with the U.S. Army Air Corps, making a total of 38 years committed to piloting aircraft. I have logged approximately 30,000 hours with Pan Am, and thankfully, this has been done accident free. I have never failed a flight check; and my medical bank has never had a withdrawal. I am pleased to believe I have been a faithful employee contributing to the growth of Pan Am.

But, I am not trying to inflate my ego, but only to express my appreciation for the rewards Pan Am has contributed for my efforts. Working for the leader in the industry has always been a source of pride to me, and was the reason I chose Pan Am for an Employer. You have made available aircraft of foremost technical ability to do the job required. And, you have always stressed "Safety First", and never challenged my command decisions to uphold this principle. You have always sought personnel of the highest calibre, so it was a pleasure to work with them professionally "on the job".

In all my years of employment, Pan Am has never missed a pay check, nor even late in sending them. (For one who experienced the "Great Depression", this is a miracle.) For this, my family joins in saying "Thank You". And, we thank you for the generous travel priveleges accorded us. And, if that were not enough, generous retirement pay, travel, and medical benefits continue after retirement. Again, I extend my heartfelt "Thanks".

Pan Am's place in Aviation history is well recognized. While the future appears difficult, I hope the challenges will be met with the same pioneering spirit of the past, to insure Pan Am's leadership role in the Aviation industry. My personal commendation to you for past and present leadership efforts, and my best wishes for "smooth flying" in the years ahead. Retirement is imminent and I'll say "So long" - but I expect to be watching and promoting Pan Am for many years to come.

Sincerely yours,

Robert C. Evans
Capt. - 747's

Excerpts - (from letters) -

Chief Pilot Waugh - "This is another instance of your care and concern for your fellow workers which we shall miss, but all of us shall continue to stand taller for having had the privilege of serving with you".

Chief Pilot Miller - "It is a source of great personal satisfaction to commend you on the excellent and professional manner in which you conducted Flight 72, under your command, on March 25th during the nose wheel up landing at Frankfurt".

King Hussein of Jordan - "The flight was a smooth one, and the courtesy and charm of the crew and flight staff was incomparable"

Passenger Markwith - "Please forward to Captain Evans my appreciation for the smoothest flight I can remember in quite a few years of international travel. His landings at Munchen, Istanbul and Beirut were the "grease jobs" so often talked about and too seldom performed. Captain Evans referred repeatedly to the PAA flight route guides and made certain his passengers knew where they were and when to look for recognizable geographical or cultural features. Thus, he completely refuted the commonest and probably most often justified criticism of jet travel - there's nothing to see".

Purser Dorothy Bohana - (After landing - and helping with a sick passenger.) I shouldn't have been surprised. Captain Evans has always shown concern for passengers, crew, and flight. In other words, a Captain in the true sense of the word. If this is part of his job, then he should be commended for doing his job well. As I mentioned previously, I've never seen this happen before".

Passenger DePedro - "This is the second time in which I have flown with Captain Evans under arduous conditions, and I sincerely appreciate his cooperation and care for the welfare of his passengers and crew. It is not often that we sit down to give written praise to Captains, but this is one who can not go being not "written up".

Passenger Von Provon - "It was a gratifying experience to see artistry of air transportation so ably demonstrated by Captain Evans and his staff".

Chief Pilot Warren - "Although I believe this letter along with the accompanying letter from Vice President Lipscomb adequately expresses the appreciation for your efforts, I would like to add my own congratulations for the manner in which you sold your company and yourself to these individuals.

Pass. Service Supervisor Mukerji - "Your method of posting the navigational chart, the wording of your announcements, and your idea of presenting the chart as a prize to the passenger with the closest estimate of actual arrival time, can hardly be improved". (Paraphrase - "I hope it will become standard company policy".

E.

fred c. proebsting
238a heritage village
southbury, connecticut 06488

March 26, 1970

Captain Robert Evans
204-A Heritage Village
Southbury, Connecticut 06488

Dear Captain Bob;

It is rare that one finds in an artist, one of the greatest salesmen, that we have ever had the pleasure of listening to.

You inspired your audience, and instilled in them a sense of confidence and an overwhelming desire to fly in PAN-AMs new BIG BIRD.

Not often do we as laymen, have a picture painted with such inviting intensity, that we cannot wait till the privilege of experiencing the satisfaction others have had on the maiden flights to Europe.

There is no doubt, that it is not only your knowledge, but your appreciation, of the creativity, that has gone into the making of this #747 you love. It reaches out to your audience. It dissipates any timidity, they might have in experiencing this wonderful flight.

I realize now why PAN-AM has always maintained, the confidence of the public. It is not only due to the fine ships they purchase, but the ability to select men of wisdom, knowledge and a love of what they are doing.

We feel you Captain Bob, are the epitome of all that PAN-AM stands for.

Thank you for broadening our knowledge and showing us the magnificent accomplishment that integrity in every detail can make possible.

Again thank you, we are grateful for a wonderful evening.

Sincerely,

A handwritten signature in cursive script that reads "Fred Proebsting". The signature is written in dark ink and is positioned below the typed name "Fred Proebsting" which is circled in the text above.

F.

PAN AM DEMISE - STATEMENT

Many have questioned how Pan Am could have declared bankruptcy in 1991 and lost to the business world - when 20 years earlier they were at their zenith as "One of the worlds pre-eminent airlines." Not privy to executive knowledge, I will answer the question based on my knowledge as an employee of 36 years.

In my opinion, the reasons are:

1. Government hostility for Juan Trippe, who negotiated International mail contracts, in early years, without government sanction or credit. This "payback" attitude existed in spite of Pan Am cooperation with Federal government need for aircraft, war bases, and "International Special" flights.
2. International competition with Government Flag Airlines of other nations - who enjoyed funding and favorable regulations. Ex. - Aeroflot, Japan Air, Air France etc.
3. U.S. Government allowing American domestic airlines to enter the international routes - but denying Pan Am the right to domestic routes for the passenger market.
4. Political favoritism - in the route awards. Pan Am was recommended by CAB for the New York - Mexico City route - but it was awarded to Eastern Airlines by Pres. Truman for political payback.
5. International political favoritism - when Pan Am had a mail contract @ 52 cents per ounce cancelled in favor of an award to Air India for \$1.52 per ounce. It was exposed by Pan Am employees - but nothing came of it.
6. Detrimental Government Policy - After Pan Am developed "Round the World " routes, they were not permitted to carry passengers - except those destined into or out of the country.
7. Financial expense of introducing a new concept in aircraft - the Boeing 747. Even though it became a successful aircraft, the initial expense was very high.
8. The purchase of National Airlines to obtain domestic routes at exaggerated value.
9. Losses incurred with the terrorist bombing of a Pan Am 747 over Lockerbie Scotland.
10. Loss of the "Pan Am" spirit among employees - due union activity.

My personal loss with the Pan Am demise was - loss of \$50,000 insurance policy, all medical benefits, and travel privileges. My retirement funds were protected. Sentiment for this great Company - and it's contribution to me will never be lost.

G.

PRIVATE FLYING - MOONEY AIRCRAFT



Wilma and Robert - with their Mooney 180 - E aircraft. It was four place, low wing monoplane, 180 HP (for a speed of 180 mph), retractable gear, & wing flaps.

(Our dog Heidi should have been in the picture as she was a frequent flyer.)

Primary use was:

Day flights - Fisher Island, Cape Cod, Martha's Vineyard & Nantucket.

Short X-Country - Saranac Lake, Syracuse, NY, New Hampshire & Albany.

Extended X-Country - Detroit & Muskegon, MI, St Louis area.