**Epilogue to the Book**

***Michigan Lighthouses, An Aerial Photographic Perspective***

**Introduction**

S

ince the original publication of *Michigan Lighthouses, An Aerial Photographic Perspective* in 1994, I periodically related tales and incidents that occurred during the flying and photographing. My friend, fellow pilot and Spirit Airlines Captain Tony Zarinnia, after having listened to several of these said, “Wagner, you should write up all these little details.” I thought that a plausible idea and followed up with this epilogue.

**How Many Lighthouses?**

I

’m often asked, how many lighthouses lie in Michigan Waters? I number 104 in the book meeting the criteria described in the first section. I show Copper Harbor and Presque Isle range lights (four structures) but I do not number them. St. Joseph, Muskegon South Pier and inner lights, Grand Haven inner and outer pier lights, Grand Marais and Cheboygan are examples of inner and outer pier lights, all of which appear in one photograph with one number. And Munising has a rear range light stuck way back up in the hill and barely visible. The Coast Guard counts hundreds of “Aids to Navigation” on the Great Lakes.

The number becomes apparent when considering Michigan has 3,200 miles of shoreline on four of the five Great Lakes. There are navigational aids while others mark harbors; they also identify many treacherous shoals that are hazards to navigation. The State of Michigan and many persons have gotten exuberant about the total number of lighthouses, claiming the most in the United States; that is correct but I don’t get excited over it.

**The Airplane**

M

y original 1968 Cessna 172 did not have an autopilot (my current C-172 has). So, loading roll film in the Bronica film back was often challenging—especially in turbulence. It was necessary to have one hand on the roll of film and the other on the film back when changing film—otherwise the whole roll could unravel and be exposed.

I would most often change film when traveling from one location to another at an altitude that would be safer with no hands on the wheel. I sometimes refer to the resulting gyrations as doing an Immelmann—an aerobatic maneuver from World War I, reversing course 180 degrees while simultaneously climbing. That’s why I had four film backs so I could load up an advance supply of film.

**The Flying**

I

n the course of flying and photographing, I fly with my left hand and manage the camera with my right. There is a certain degree of controllability with the rudder pedals in a Cessna 172 allowing me to momentarily shift back and forth with my left hand between the control wheel while cushioning and stabilizing the Bronica camera.

On the occasion of filming the Stannard Rock Lighthouse, some 25 miles out in Lake Superior, I departed leaving my dear friend, Dr. Clara Lee Moodie, at the Houghton, Michigan Airport. She inquired as to why she was there and not flying with me. I replied, “somebody needs to be back here to report in case I don't return.”

**The Camera**

T

he Bronica GS-1 “medium format” camera is relatively heavy. The image size is 2 ¼ X 2 3/4 inches or 6x7 cm. The GS-1 has a necessary right-hand grip (as I fly with the left hand) and a “rapid two-stroke” film advance with the right thumb. When photographing the lighthouse project, I did not have a gyroscopic stabilizer but later purchased one for $2,500. The combined weight was slightly under 14 pounds with the camera perhaps weighing six or seven. I had a six-pound barbell beside my La-Z-Boy chair that I exercised with regularly to better handle the camera. At the end of a six-or eight-hour day, it got rather heavy.

My favorite Bronica lens when doing aerial work is the 200-millimeter. A 100-millimeter is the “standard” focal length for the 2 ¼” by 2 ¾” image. A lens of double the standard focal length allows “foreshortening” the image, bringing or “compressing” the background into view. That technique was rather widely used throughout the book. The longer lens also adds difficulty in obtaining sharp images.

Often asked by camera enthusiasts what shutter speed would I shoot at. The Bronica camera does not have a focal plane shutter, it is a leaf shutter in the lens with a max speed of five-hundredths of a second. That, coupled with Kodachrome 64 film (that I shot at a 100 ASA speed) is not low-light photography. It also makes the lens more complicated and expensive!

**Kodachrome Film**

D

eveloped in 1935, Kodachrome was a bastion of the film industry! Kodachrome is actually three layers of black and white film separated by filters of the primary RGB colors, red, green, blue. It is inherently very stable. It was a complicated film to process. Films such as Ectachrome and Anscochrome will fade and discolor within a few years. I have Kodachrome images from the 1950s that are still true brilliant colors.

Manufacturing ended in 2009 and processing ended on January 18, 2011. Wikipedia and *The Nightowl Trader, the Rise and Fall of Eastman Kodak*, has a lengthy and detailed description of Kodak and Kodachrome film. Today, digital cameras, invented by Kodak, operate on the same principle, pixels separated by filters. Kodak, in grave oversight, allowed Japanese camera manufacturers to embrace digital photography destroying the film industry. Reportedly, they were concerned digital cameras impacting their film sales. It certainly did!! Thirty years of mismanagement and the failure to foresee technology’s direction resulted in Kodak’s stock declining from a high of $94.75 to today’s $2.95.

Kodachrome film was used throughout the book with only a couple of exceptions. I had on several occasions hoped that Kodak would produce it in the 220 format. My sage photographic advisor, Les Kirby, once said that Kodachrome was too thick to fit on a 220 roll and it could possibly hang up in some cameras or would require a pressure plate to hold it flat—causing Kodak more problems than they wished. It was never produced much to my regret.

As digital cameras gained a foothold in photography, Kodak ceased production and then a year later, processing Kodachrome 120 roll film. I had accumulated several rolls of exposed but unprocessed film and had an inventory of 12 or 15 unexposed rolls. I learned that Kodak agreed to one final processing run of 120 film in London, England. Being inspired to use up and process my remaining rolls, I set out for Western Lake Superior to photograph its lighthouses and especially Split Rock.

En route the airplane’s alternator went offline—inoperative, kaput! Skyharbor Airport and Jon Messer, the IA mechanic who did the engine installation a year earlier, was along my route of flight, so I landed to see if a quick fix, such as a broken wire, was possible. It was not. I continued onward with photography along Lake Superior and finished the day as nightfall approached at the Split Rock Lighthouse on Lake Superior’s western end.

An aircraft engine operates on magnetos and therefore loss of the electrical system does not affect its operation. I flew with the master switch and all the electric systems off, conserving the battery, bringing up only those essential items such as radios when needed. My JPI engine monitoring and fuel flow system, having been shut-off, was no longer accurate.

I departed Split Rock heading eastbound towards Lansing with the master switch off. As I approached the midpoint of Lake Michigan, I had to decide as to refuel somewhere short or if I had enough fuel to make Lansing.

Aircraft fuel gauges are notoriously inaccurate, only being required to show empty when the tank is empty and my JPI fuel flow instrument was in-operative. I had a critical decision—make Lansing by 9:00 PM, the cutoff time to make the UPS shipment or to land and refuel. Uncomfortable with the remaining fuel quantity, I decided to refuel at Mt. Pleasant, Michigan.

However, as I approached the Michigan shoreline, an undercast with tops of perhaps 3,000’ required an instrument approach into Mt. Pleasant. I turned radios on and contacted Saginaw Approach and requested an IFR clearance to MOP. I conveniently broke out of the overcast at about 1200’ feet and continued onward to land in Mt. Pleasant. Fortunately, Bobby, the line boy, was still working at 8:00 PM. We did a “quick turn,” and I was immediately on my way to Lansing—again with all electronics off.

I contacted Lansing Approach about 20 miles out advising that my alternator was off-line, and if we lost radio communications, they give me a light gun signal to land. LAN asked “if I needed assistance” and I answered “negative.” Switching to tower, I was cleared to land on runway 06 and both sides of the runway were lined with fire trucks and emergency equipment. As I taxied to my tiedown, I was followed by security. They inquired as to my problem, and I said simply that my alternator was off-line.

It was about 8:50 and I informed security I had a package that required delivery to UPS by 9:00 PM. I would either return to the tiedown, or they could follow me to UPS and I’d give them any needed information. Knowing the officer, and that only an alternator was offline, proved sufficient. I had pre-packaged and addressed a shipping carton to the final processing center in London. I arrived at UPS at 8:55 pm, just in time to make the 9 o'clock lockout and my Kodachrome film would be on its way to London for the final, worldwide processing run of 120 film.

Fortunately, my blackout flight to Lansing was uneventful, I could see other aircraft—they just couldn’t see me! And, I regarded the line-up of emergency equipment, after saying “not required,” as just another card a bureaucracy plays in “the numbers game!”

F

or years I had a professional color lab, Customation, Inc. in Michigan City, Indiana, process my negative film and produce enlarged, color prints. Color processing from negatives was better farmed out as the chemicals had a short shelf life and were difficult to maintain. I remember the early writings by one of their sales reps about the advent of digital photography. I paid only casual attention.

Today, I operate a Canon EOS MK II 7D digital camera with three lenses, an HP Z-3100 digital printer, an Imacon drum and a Nikon 3000 scanner, probably at a cost of some $30,000—with a closet full of film cameras worth four cents a pound or destined for the Smithsonian. And, Customation is no longer in business—a scenario referred to in earlier times as a “buggy whip business!”

**Publishing the Book**

T

he book was self-published, and therefore many aspects were my responsibility. We interviewed five different printers and two binderies. Paper had to be inspected, selected, purchased and shipped to the printer. The financing had to be arranged. I met with Comerica representatives and they had no interest. Others did not even respond to my inquiry. Old Kent Bank in Grand Rapids, with whom I’d had a checking account for several years, agreed to a loan.

I became intrigued by Color Associates, a printer in St. Louis, Missouri, who had just implemented the process from Japan of printing on a Komori Lithrone 640 waterless press in 400-line screen—the first in the United States. This resulted in the fine resolution and sharpness found in the images. Unfortunately, this printing process was extremely sensitive to on-press temperatures; a plus or minus of one-half degree would cause unacceptable color.

In the final count, I was shorted 2,200 copies (of 10,000), because of unacceptable off-color variations. I originally priced the book at $49.00 but raised it to $75.00 to make up for the shortage. The total cost of publishing was about $232,000. Knowing Color Associates’ considerable costand time in going back on press and all the ramifications of paper supply, etc., I mistakenly gave them the option of making up the difference if and when we did a second printing.

Color Associates also decided to play hardball. Before the third and last press run, I had a phone call that demanded payment in full—that was a bit upsetting! They had already been paid for the prior two press runs. I had financed a substantial portion of the book through Old Kent Bank and had advance orders for about 250 copies of which I intended to use the proceeds for the final payment. I anticipated a 30-day payment schedule. This was not about to happen!

On a Friday evening, I received a phone call from my dear friend, Dick Moehl, President of GLLKA, inquiring “How’s it going?” “Not very well,” I replied and related Color Associates’ demand. “How much is that,” Dick inquired. I said, “About $76,000.” How much do you have” asked Dick, I said, ”About $26,000 or so!” Dick said, “Let’s do it!” On Monday morning a check for $50,000 arrived. It took me about six months to repay the $50K, no-interest loan! Great friends always surface in a time of need!

In 1998, with a plausible second printing, we flew to St. Louis and met with Corporate Color. Unfortunately, the structure of the company had changed. The former CFO had acquired the company and was now the president and CEO. After 20 minutes of conversation, he said, “I think we had better let the professionals handle this” which meant sue me!

I explored legal options with John Logie, of Warner, Norcross & Judd in Grand Rapids, and it became complicated and potentially very expensive! We signed the contract in Grand Rapids; Color Associates was a Missouri Corporation and would most likely go for a change of venue to a St. Louis Federal District Court, then requiring St. Louis Attorneys. The whole issue became so convoluted I decided to discard the idea and do a second printing with Michigan printers.

In July of 1998, I undertook a second printing with Superior Color Graphics in Kalamazoo and their sister company, Etheridge in Grand Rapids. Because of the size of the project, each printed seven forms and delivered a full complement of 10,000 copies—a perfect job! This time the bindery wrapped and stitched the vellum fly-sheet around the first signature. No more loose sheets!

**Old Kent Bank, Financing the Book**

My meeting with Mark Mushinski, the Old Kent corporate loan officer, was interesting. To secure their loan, they, of course, had all the books as collateral. Additionally, they placed a mortgage on my home (which was free and clear), I had previously sold a home in St. Johns on a land contract on which they placed a second mortgage, and they recorded a lien on my airplane with the FAA in Oklahoma City. They didn’t want my car—it was too old! I commented, “Mark, you have this loan collateralized about three times over” and he replied, “John, we are not in the book business!” But, my friends at Old Kent Bank made it happen!

**The Bindery**

We interviewed two binderies and selected Nicholestone Bindery in Nashville, Tennessee, in the middle of the “Bible Belt.” They had considerable experience and equipment in the bindery business. That included five Smythe Sewing machines where the other bindery had only two and could produce no more than 1,000 books a month. Charlie Nichols, the company’s founder and CEO, was a grand ole guy who flew B-25’s in WW II, so we had an immediate connection.

Unfortunately, during the first printing, the big Corporation Rand McNally was buying out Nicholstone and was very much driven by the “bottom line.” The vellum fly-sheet that often detached was an example. We were most often on-site in St. Louis and Nashville during the binding and printing process.

This “table-top” book in the 11x14” oblong format required much handwork. Smaller books were considerably automated, up to 10x12”, but this book was different. For example, when the 12-page “signatures” were gathered, there would be a conveyer belt on which a collection of ladies would each hang on the belt the succeeding signature, all the while sipping coffee and smoking cigarettes. I occasionally have books returned where pages are upside down or out of sequence (page 103 following page 30). I chuckle and think of that line-up of hillbilly ladies sipping and puffing!

**The Book**

T

he opening page of each of the book’s four sections contains an “abstract photograph” of a lighthouse in that section. The abstractions are mostly taken into the sun as evidenced by the shadows, referred to as “backlighting,” casting deep shadows in the foreground, but also reflecting its light and the action of the wind, waves and floating ice on the surface. Each makes an appropriate introduction to the section.

V

ellum fly-sheet, the first page in the book, was written by former Upjohn President, Bill Parfitt. I don't recall how Bill came in touch with me regarding the book other than one Saturday morning he telephoned and offered to write that piece. He skillfully expressed the essence of the book.

In the first printing, the fly-sheet was “tipped-in” meaning it was glued. Unfortunately, the first page was also varnished. No one realized the glue poorly adhered to the varnish and many of the vellum pages loosened and detached. I did develop a method of gluing many books with a hot glue gun. In the second printing, the fly-sheet was “wrapped” around the first signature, (as page 12½) firmly securing it. On the half page, we printed flying seagulls. I probably took 50 photos trying to capture the right seagull image!

S

pot varnish was a technique used on several pages. This process uses a separate printing plate highlighting selected portions of an image adding a sense of depth, often embellishing floating ice, wave action and sunlight. This was a whim of my graphic designer, Bill Spagnuolo, perhaps adding a few thousand dollars to the book’s cost. In the case of the Granite Island Lighthouse, the spot varnish was used to highlight the floating ice that ran right to the edge of the page.

H

olland Harbor Lighthouse, page 1: Classic Waco Airplane over the Holland Harbor Lighthouse. The Waco Airplane was manufactured in Lansing by my friends Dick Kettles and Bud Kauffman. This airplane was based in Midland, Michigan, and was at the factory for an annual inspection. It needed to be flown after the inspection, and we set up the flight to Holland to photograph it over the Holland Harbor Lighthouse. We flew for approximately two hours, stopping once to refuel the Waco and get a bite to eat.

It was a challenge to photograph the faster, larger and heavier Waco. It flew a smaller, inside circle going as slow as possible and I’m on the outside flying as fast as possible and positioning the two airplanes over the lighthouse below. While I usually fly alone on lighthouse missions, it is prudent to have another person along while shooting air-to-air. A midair can wreck your whole day. It was an interesting challenge but an image conceptualizing the book with an airplane and a lighthouse in one photograph.

P

ancake Ice, page 2: while photographing the South Haven Lighthouse, I wandered a distance offshore observing the ice patterns in Lake Michigan. It was very unusual and as I circled the area at perhaps 200’, I observed how Pancake Ice is formed.

On a very calm and cold day, a flat sheet of ice freezes on the lake. As the day warms the winds pick up and the flat sheet is broken into large chunks. As the winds further increase, waves gather and wash over the edge of the ice floes. The interesting part is that the unbalanced weight of the ice causes the ice floes to tip and rotate forming the circular buildup of ice around its perimeter.

*B*

*urns Harbor,* Page 3: as I was cruising eastbound along the shoreline of Lake Superior, I discovered the thousand-footer *Burns Harbor*, “downbound” towards Whitefish Point. Considerable winds were blowing—perhaps 30-35 miles per hour as evidenced by the waves over the bow. My Cessna 172 is equipped with a “STOL” kit, an acronym for Short Take-Off and Landing. This gives better short-field performance and greater stability at slower airspeeds—a desirable quality for sharp images while flying.

I flew alongside the *Burns Harbor* photographing and observing its speed in relation to mine. I actually “toyed” with the idea of slowing to maybe 50 MPH and allowing the *Burns Harbor* to pass me! I was, however, on a time-critical mission and thought I should not be playing with such a frivolous venture. After all, how many “Footers” have passed a flying airplane!

S

tatue of Liberty, page six: was taken from a Lake Amphibian in 1964 while circling the Statue of Liberty which served as a lighthouse for 16 years, from 1886 to 1902. I sold and was delivering that airplane to George Capanagro at the Flushing, New York Airport. Little could I have imagined that I would use that photo in a book 30 years later. In my 60 years of flying and 40 years of working in the industry, I often remember such occasions, but seldom do I remember how I got home!

T

itle Page, page 9: when you design and publish your own book, you can do almost anything! I designed page nine on which to autograph. The lengthy list of credits as well as the index is in the back of the book. This choice was the result of an autographed copy I received from Jacques Cousteau in his book *The Silent World*.

In the 1950s, I was in the diving business and sold self-contained underwater breathing apparatus (SCUBA—terminology adopted in later years) equipment for U.S. Divers Corporation.

Captain Cousteau’s movie, *The Silent World,* won the Cannes Film Award in 1956 and debuted in three United States cities; Los Angeles, New York and Kalamazoo, Michigan (Kalamazoo being a “typical midwestern city”). I had an exhibit at the movie theater and enjoyed dinner that evening with Captain Cousteau, his wife Simone and publicist James Dugan. Later we appeared together on WKZO TV.

Captain Cousteau, Simone and Jim Dugan each autographed my copy of the *Silent World—*a very unique thing! It was written in French and I have translated it to English. It “was from the divers of the Mediterranean to the divers of the Great Lakes.” I so cherished that opportunity that I dedicated page nine (the title page) for personalizing autographs in my book.

S

tannard Rock, Page 15: After photographing the structure, I was flying out at a rather steep angle of climb and I had put the camera aside. But, seeing the view from several hundred feet, I circled and took this picture. Within a quarter-mile of the shoal, Lake Superior plunges to a depth of 700’. Michigan’s record Lake Trout of 61.5 pounds was reportedly taken at this location.

I casually looked back at the shoal and structure; and seeing the distance; I pondered whether or not I could swim to the lighthouse if the engine failed. I swam in high school and in college, but in Lake Superior—25 miles offshore—what a frivolous thought that was!

S

hepler Ferry Service, page 17: once when selecting images, I had occasion to talk to Bill Shepler, owner and president of Shepler Ferry Service. I mentioned I had a photograph of all three ferries entering Mackinac Harbor. He said, “John, why all three, why not just Shepler?” I quickly thought and responded, “Bill, you were in front!” That seemed to placate Bill and left me in good stead.

A

 fogbank at High Island, page 25: “When the landmass is covered, the water is open” an expression passed along from an old, sage fellow aviator from up-state New York. At the very hour I took this photo, two couples from Battle Creek were departing Northport at the tip of Lower Michigan in a Cessna 172 for Beaver Island and ran into this fog bank.

Two were teachers in the Kalamazoo school system, they were not instrument rated and attempted to “scud-run” underneath the fog bank. They crashed and all four were killed. Perhaps, if they had known this little axiom, this tragedy might not have happened. As we can see from the photo, High Island, adjacent to Beaver, was clear.

S

and Hills Lighthouse, page 29: Owner, Bill Frabotta, was a bit disheartened that the book’s photo was taken shortly after he acquired Sandhills. The windows were boarded up and maintenance was lacking. Considerable restoration followed in the ensuing years converting it to a bed & breakfast. Bill died in 2016 and his wife Mary, with the energy of a gerbil, has continued to operate the facility. During WW II, Sandhills was a naval training station housing as many as 200 personnel. The 2,500 square foot building is reportedly the largest lighthouse in North America.

E

agle River Light, page 30: I made several trips to Eagle River and failed to recognize the actual lighthouse building. There was a structure up the hill, some quarter-mile away, which had characteristics similar to a lighthouse, perhaps a schoolhouse with a cupola atop. I knew the lighthouse was a private residence and perhaps considerably modified. After circling a bit, I finally identified the correct building, clearly spotting the remaining lantern room.

S

tannard Rock, page 35: flying out to Stannard Rock, named after a ship’s captain, the name in the proofs was spelled correctly. The printer in doing the setup for the book corrected my “oversight” and change the name to Standard (S-t-a-n-d-a-r-d) in the first printing. I caught and corrected the printer’s “correction” in the second printing.

P

ortage Lake Lower Entry Light, page 40: I have traveled the state doing art fairs, signing, and promoting my book. I would occasionally encounter a graduate of Northern Michigan University in Houghton, Michigan. They often related how diving off the top of the Lower Entry tower was a thrilling experience. I think that be best left to the engineering students at Tech.

T

he Flying, page 44 & page 110: the only photograph in the book taken by another person was by my good friend, Dick Moehl, president of GLLKA (Great Lakes Lighthouse Keepers Association). Dick was standing atop of the tower at St. Helena Island photographing me while I was in the air photographing the Boy Scouts forming the “T-4” on the ground representing “Troop 4” out of Ann Arbor. The Boy Scouts through the years were instrumental in the restoration of St. Helena. The flags atop the tower can be seen in both photos as well as my first red and white Cessna 172, N35711 on page 44.

B

ig Bay Point Lighthouse, page 45: I had been in touch with an earlier owner, “Buck” who also owned an airplane and flew from an airstrip he constructed on his property. I was tempted to land and meet him and discussed landing on his runway, which can just be seen on the upper left of the photograph. However, time constraints again demanded I keep flying and shooting during daylight hours. I never did meet Buck.

G

ranite Island Lighthouse, page 46: Granite Island is illustrative of that technique with the varnish running off the page, highlighting the edges of the photograph and sunshine reflecting off the ice and water. I once had a lady contact me saying that the page was defective and wanting another book. I explained to her the varnish process, a technique most evident on that page.

M

unising Front and Rear Range Lights, page 50: was a difficult shot. I made several trips to Munising attempting to get enough light and visibility on the rear-range to be observed. If one carefully studies the upper left-hand corner of the photograph, you can see it in the background. Taking that shot required flying up the bay at a very low altitude, avoiding the city with a sharp left circling turn while attempting to get both structures aligned in the picture.

G

rand Island North Light, page 52: printing the book involved laying out six images on each side of a 32 x 40” sheet of paper, referred to in printing lingo as “six up.” In obtaining a color balance of all six photos, there is a compromise between each. I once did an enlarged photograph on my Hewlett-Packard Z-3100 Inkjet printer for a professor at MSU. It was then I fully realized the spectacular range of colors in the image.

When printing a single image, color balance can be achieved on that one print. The fall colors in the trees, the glistening reflections off the water and the colored striations in the rock formation identical to that of pictured rocks, were all brilliant. The print was spectacular!

A

u Sable Point Lighthouse, page 53: this photograph was intended to locate the lighthouse in the foreground of the Grand Sable Dunes. The 200 mm was the lens of choice, and flying a distance offshore at a low altitude captured the relationship of the lighthouse to the dunes.

Horror stories exist regarding the trek to the lighthouse as the parking lot is about a mile away. Black flies swarm by the millions! At an art fair, a lady once related her experience walking to the lighthouse, they got perhaps a quarter mile down the path and were so overcome by blackflies that she and her family dashed back to the car, quickly jumped in and sped down the roadway at 50 mph with wide-open windows chasing them out. If one visits Au Sable Point, come prepared!

G

rand Marais Harbor Range Lights, page 54: spending one night in Grand Marais, and perhaps at a local eatery/brewery, I decided to investigate the rear-range Grand Marais Light. Having found it rather fascinating, I climbed the rear-range ladder to observe Lake Superior. You can't see much at night, whether flying or climbing—thou shalt not drink too much!

C

risps Point Light, page 55: This image shows the original entryway building to the lighthouse. The year following this photo, a violent Lake Superior storm washed the building away. It has since been replaced with a new historical accurate structure.

W

hitefish Point Light, page 56: Whitefish Point is a fine example of an elegant, quintessential restoration project being completed over the last 35 years. As I look at the 1989 photograph and having visited Whitefish Point in the fall of 2018, I see the considerable restoration that has been accomplished. There are many photographs in the book that can be regarded as “historic” because of continued deterioration or restoration projects.

G

rand Haven Lighthouse, page 63: I often ask mariners what is peculiar about this photograph of the *Paul Thayer*. As I was flying, I observed the vessel approaching the harbor and then circling back out into the lake. I thought this very curious and related it to my flying experience. In aviation, there is a procedure known as a “missed approach.” I thought, “Oh my, did the *Thayer* miss the harbor?” As I hung around, I ultimately learned that he was positioning to back into the harbor as he was unable to turn around in the river.

W

hite River Light, page 67: a difficult lighthouse photograph. It is situated back within a recent growth of trees. I made several trips trying to get favorable lighting on the structure. The photograph in the book was the best available. Today, many of those trees have been removed.

L

ittle Sable Point, page 68: this photograph probably has the book’s least quality. It was taken on negative film which does not lend itself particularly well to color separations and publication. I chose this image for the several small ponds of water lying within the dunes. This was the result of a storm and seiche from the previous day which left pools of water on the beach and long shadows reflecting the many footprints in the sand. A seiche is a rapidly rising wall of water that can be several feet high, the result of winds and rising barometric pressure. Seiches on the Great Lakes have resulted in numerous drownings through the years.

B

ig Sable Point Light, page 70: when selecting images, the color in the dunes appeared inaccurate. However, further investigation revealed the whites are white, the black is black and the red spectrum in the sand, is in fact, quite accurate.

I remember the occasion as the photograph was taken late in the day— evidenced by the long shadows. The sun, settling in the west, showed up against a thin cloud deck at perhaps 20,000 feet, which in turn reflected the bright red hues downward onto the dunes.

Once at an art fair and book signing, a fellow asked me if I had the Big Sable Point Lighthouse. I showed him the page in the book and a big grin crossed his face! He said, “I was running that pile-driver that was setting the sheet-steel reinforcing the shoreline from waves and high water!”

M

anistee North Pierhead Light, page 71: has an elevated walkway or “catwalk” that provides access to the tower during hazardous or stormy weather. It is one of four catwalks on the western shore of Michigan, the others being St. Joseph, South Haven, and Grand Haven.

F

rankfort North Breakwater Light, page 72: when photographing a lighthouse such as Frankfurt, which is a rather unpretentious structure compared to many others in Michigan waters, I often choose to bring surrounding objects into view. In this case, it is the South Breakwater Light, the boat in the foreground with the city and harbor in the backdrop. Other examples of that concept are Charlevoix, Alpena, Escanaba (Sand Point), Cheboygan and Windmill Point.

V

essel *Peter Misner,* page 74: an old friend from Kalamazoo, Walter Watkins, who was a boatswain for the Interlake Steamship Company of Middleburg, Ohio, once asked, “Where was this photo taken,” I replied, “In the Gray’s Reef Passage.” He commented that the *Peter Misner* was sailing illegally in open waters with open hatches.

A close-up inspection of the image disclosed a man in a blue shirt, starboard of the pilothouse, looking back at me with binoculars. He was perhaps fearful that I represented the Coast Guard and his vessel and his company would face a serious fine for sailing with open hatches.

S

outh Manitou Island Light, page 76: the quality of a medium format camera and Kodachrome transparency film is evidenced by this image where one can read the building’s year of construction, 1858. It has a “covered walkway” which affords access to the light tower during inclement weather. North Manitou Island lies along the horizon.

G

rand Traverse and Old Mission Point Lights, pages 78 & 79: both with low water and showing considerable shoreline, characterizing the wide variations in lake levels. In the early 1970s, on several occasions, I flew Blanchard Mills, a photographer with the Michigan DNR, along the Michigan shoreline of the Great Lakes, photographing shoreline erosion.

This was a time when high-water and wave action was seriously eroding the shoreline with homes falling off the edge of the dunes. Once I gave Bill Shepler a photo of the St. Ignace Harbor and he replied, “I just spent $400,000 dredging the harbor,” further emphasizing the great variations in lake levels.

C

harlevoix Light, page 80: another example of a structure I describe as “unpretentious” where I have combined the colorful railing, the late-afternoon shadows of the two piers and boats passing in and out of the Harbor.

S

killagalee Light, page 82: an interesting event occurred when I once started to photograph the Skillagalee Lighthouse as my first destination. On an earlier photographic run, during moments of an idle mind, I conjured up the scheme of suspending the camera from the airplane, a kind of lose mounting arrangement, to help stabilize and lighten the load. On the way to the airport, I stopped by the local apothecary and purchased two or three feet of half-inch surgical tubing. In the airplane, I contrived a method of suspending the camera from the sun visor.

Upon reaching Skillagalee, I descended from a cruising altitude and started the photo run, approaching the island—down to perhaps a couple hundred feet—shooting as descending. It suddenly occurred to me that I had a problem! My left hand was on the wheel, my right hand was holding the somewhat suspended camera—and I needed to get my hand on the throttle. The problem needed to be quickly resolved—I don't remember how, but I did not land on Skillagalee or in Lake Michigan and the camera didn’t go out the window. That ended a brilliant idea!

S

outh Fox Island, page 86: there was an evolutionary time in photography when photographers were transitioning from film to digital. I, too, went through this process. I had onboard my first digital camera a Nikon 5700, not a very good camera! The day was especially turbulent with winds erupting over Lake Michigan and waves breaking below. I had shot a series of digital photographs with the Nikon and was backing them up with the Bronica.

I had earlier experienced a minor problem with the eye-level viewfinder on the Bronica—it would occasionally detach. I did not pay a great deal of attention to it, just repositioned it. As I picked up and switched over to the Bronica and looked through the viewfinder, a particularly turbulent gust of air thrust my forehead against the eye-level viewfinder and it became dislodged. I quickly raised my arm in an attempt to catch it and out the open window it went! I spiraled around and watched it plunge into Lake Michigan. Anyone diving off the south end of South Fox Island, please keep an eye open for that Bronica viewfinder.

S

quaw Island Light page 89: the year following this photograph, a squall line went through Upper Lake Michigan, laid down and destroyed most of the birch trees that appear in the photograph, losing the brilliant character they lent to the island.

L

ansing Shoal Light, page 90: I was flying north through the Beaver Island area on a summer day and by the Lansing Shoal Lighthouse. I had several good shots in the winter but thought I should take some in the summer. I descended from my cruising altitude of a few thousand feet and took a half dozen photos. When I examined the processed film, I discovered the lighthouse was covered with dead cormorant carcasses and bird dung—not a very appealing picture. I decided that was another good reason for taking so many winter shots!

P

overty Island Light, page 95: the image on this page also illustrates the effect of spot varnish as it runs down and encompasses the boundary of the page. In the interim years, I understand some coastguardsman made a futile attempt to seal off the roof and prevent water damage That often is the beginning of the end for so many lighthouses, water enters the building, disintegrates the plasterboard, and the interior falls apart.

M

inneapolis Shoal, page 98: when reviewing these photos, this image provided some consternation as there appear two light towers as depicted on the ice in front. “How can there be two shadows, there’s only one sun” my graphic designer, Spagnuolo asked?

Careful study reveals the image on the right is a reflection on the ice and on the left is the shadow. I probably took 25 photos of Minneapolis Shoal on this flight—a large number for me on “10 images per-roll film!” These ideal circumstances, after not having desirable images in the past, was rewarding. I also wanted to show the “water level entryway” in the center of the base giving direct access to the engine room/storage facility from a boat.

E

scanaba, Sandpoint Light, page 100: a rather unpretentious lighthouse but the image reflects my concept of including the pleasant surrounding harbor and boating activities.

C

oast Guard Cutters *Mobile Bay* and *Biscayne Bay*, page 105: I once donated a copy of my book to the St. Ignace Coast Guard Station. While there, I inquired of the Coast Guardsman who was giving me a guided tour, the nature of the photograph of the two vessels. Speculation by some questioned the two boats nestled together. Some thought that perhaps an ice flow might have jammed the propeller, others suggested a mechanical problem. The officer looked at the photograph and said, “They were probably trading videotapes!”

*E*

*nerchem Catalyst* & WAGB-83 Icebreaker *Mackinaw*, page 106: I sometimes say the reason why the *Mackinaw* was repainted red was the inability to see it in white-out conditions often found in the Straits as depicted by this photo. The *Mackinaw* is barely visible from the air, moreover from a trailing vessel—but he has the “ice track” to follow.

W

augoshance Lighthouse, page 108, at an exhibit (before the book) I once had a fellow ask me if I had photographed the “Aban” lighthouse. I confessed I was unfamiliar with it but asked its location. He explained its location and again I denied any knowledge. I felt compelled to research this matter especially when I’m suggesting all Michigan’s Lighthouses were going to be in my book. I went to the charts and found the term “Aban” and discovered it was Waugoshance—an abandoned lighthouse! And, the fellow was a boater of the Great Lakes! I hope he doesn’t read this!

S

t. Helena Island Lighthouse, pages 109 & 110: St. Helena Island lighthouse was in a state of serious deterioration as depicted by this image. A burn hole of some 20” through the floor was in a second-story room. Amazingly, the structure did not go up in flames as did the 14-Mile Point Lighthouse.

The only photograph in the book not taken by me appears on page 44. It is my airplane and the three flags of the St. Helena Island Lighthouse taken by my friend, Dick Moehl. Dick can be seen in the tower taking the picture of me while I was photographing the Boy Scouts from the air, forming a “T-4” on the ground, representing Troop 4 of Ann Arbor, Michigan.

St. Helena Island Lighthouse, page 111: it was my wish to photograph the lighthouse with the Mackinac Bridge in the backdrop some eight miles distant. This photo was rather difficult with the wind and turbulence as depicted by the flag in the Light Tower.

M

cGulpin’s Point Light, page 112: a photograph with the Bridge in the backdrop identifying its location in the Straits. A lantern room has since replaced the Osprey nest that rested in the tower top for years. The lighthouse is now operated by Emmet County and is open to the public.

O

ld Mackinac Point Light, page 113: a photograph was taken while flying at a very low altitude over Mackinaw City showing a relationship between the lighthouse, the Mackinac Bridge and St. Ignace. I made several excursions to this site. Bringing the background of the Bridge and St. Ignace meant flying at perhaps 200’ over the city and using my 200 mm lens to “foreshorten” the background. I would make two passes and then depart the area before drawing attention to someone with binoculars.

R

ound Island Light, page 114: those who remember the movie *Somewhere in Time*, Round Island is where Christopher Reeve rowed Jane Seymour for a romantic excursion. The aficionados of *Somewhere in Time* meet every year at the Grand Hotel to celebrate and view the movie. Many of the actors, directors, staff, local participants and fans, dress in period costume, attend and—schmooze.

C

heboygan Crib Light, page 117: the rear range light is barely visible about an inch below the tall tower in the rear of the photograph. I once entered the Sheboygan River with my friend Dick Moehl using the range light system at night. it’s two-dimensional entry akin to the localizer found in an aeronautical instrument approach. It is a comforting entry to the harbor during nighttime navigation.

M

artin Reef, page 119: demonstrates the many seagulls and bird activity located on offshore lighthouses. My flying nearby stirs their roosting, and some 28 were airborne in this photo. Aboard some offshore lights, the stench of bird-dung and dead carcasses is formidable.

S

pectacle Reef Light, page 120: this photo vividly portrays the effects of winter’s “reefing ice” and the water’s flow of currents during spring’s breakup. It is an example of spot varnish as it runs off the edge of the page, highlighting the floating ice. I often use Spectacle Reef as an example of my ideas of aerial composition.

A

lpena Light, page 136: another very unpretentious structure, is perhaps only 50’ high. This photo necessitated flying very low, capturing the pulp mill in the background. I made perhaps five or six tight circles over the water outside the structure. As I departed the area, I noticed a fellow fishing on the end of a nearby pier. He must have considered that a rather spectacular airshow!

S

turgeon Point Lighthouse, page 137: I made several trips to the Harrisville area, as in my mind’s eye, the winter’s ice highlighting the sand point protruding into Lake Huron, was esthetically important. Flying and photography was most difficult. The rising terrain to the west, and on too many occasions, southwesterly tailwinds of perhaps 20 to 25 mph were blowing me across the ground at 70 to 75 mph—while descending and maintaining a slow and stable airspeed. I was pleased to see the results under such difficult circumstances—this was the best of many shots!

C

harity Island Light, page 142: it was reported that the missing boards on the southeast side of the building were the result of travelers stripping the siding as high as one could reach and were used as bonfire material. The roof structure fell inward and the building has been replaced by a modern structure. The light tower remains standing. The present owner offers boat tours and dinner at the new structure replacing the keeper’s quarters

S

aginaw River Rear Range Light, page 143: somewhat difficult to photograph as nearby hi-tension powerlines run east/west parallel to the line of flight. Whenever photographing this site, I had to remain extremely diligent. On an occasion or two, I believe I had another with me to keep a sharp eye on our position.

B

urning the “Tennies” page 145: one of the fun writings was recalling the night I spent in Bill & Harry’s Bar (not the real name—but I forget), when several of the Port Austin Reef Association members were there for an evening of conversation, drinking and relating the long and rather gory details of the restoration of Port Austin Reef. The resulting little two-column narrative is always enjoyable to reread.

I’ve always had a close association with the Port Austin group, having early-on followed their work and photographed its progress. I made an early trip to the lighthouse on the pontoon boat, loaded to the waterline, carrying the first replacement roof rafters. My friend Lou Schillinger and his brother Mark, were both students at Michigan State University and initially flew my airplane through Mark’s flight training. Both worked at Hughes Flying Service when I flew for Hughes and later at General Aviation as line crew. We continue to share a great friendship.

T

he Blue Water Bridge, page 151: the book, originally published in 1994, now contains images that might be regarded as “historic” as in the case of the Blue Water Bridge. A second span has been constructed for westbound traffic back to the United States, and the former Thomas Edison Inn is now the Hilton Double Tree Inn.

T

ugboat *Point Carroll* and barge *McAsphalt 401*, page 157: how could one not help but photograph such a colorful and symbolic piece of equipment operating on the Great Lakes. Several vessels are included in the book as well as in my vast collection of photographs.

D

etroit River Light, page 161: perhaps the last photograph taken prior to printing. I was not pleased with the photos of the Detroit River Light and as a final effort meeting publication deadlines, I again flew to the site. The result was a fascinating conglomeration of floating ice in such a scenic backdrop as the colorful Detroit River Light. The use of the varnish plate further emphasizes the ice-laden river.

U

.S. Coast Guard Lifesaving Station, page 166: on one occasion after having taken photos of the Harbor Beach Lighthouse, I discovered a nearby U.S. Coast Guard Lifesaving Station in considerable disrepair. As part of a historical record, I decided to photograph it as well. I made several loops around the facility.

Afterward, I refueled at the Bad Axe Airport. I was greeted by Garret Kladjeck, the Airport Manager. He asked if I was flying in the Harbor Beach area. I responded affirmatively. He had received a phone call from plant security at a nearby facility to the Coast Guard Station. The company produced Aspartame, the sweetener marketed as NutraSweet. Considerable controversy surrounded the safety of Aspartame and was the subject of congressional investigations and legal actions.

Aspartame was developed by the Huron Milling Company in Harbor Beach, was sold to Hercules Powder Company and eventually to the G. D. Searle Company. I was told the product was about to go off-patent and they were concerned that someone was photographing their facility from the air—corporate espionage! One never knows who on the ground is going to be peering through binoculars and record the “N” number of your airplane.

T

wo Sisters at Sunset, Page 168: one never knows where certain images will fit in a publication. How appropriate it was to have photographed the St. Clair Flats Old Channel Lights into the setting sun as the last image in the book!

D

ust Jacket, back cover: once passing the Point Betsie Lighthouse, it occurred to me it was a very bright clear day and Sleeping Bear Dunes was visible some 20 miles distant. It was rather turbulent with gusting winds and white caps on Lake Michigan. I retraced my course and slowed in a stabilized approach at a very low altitude, perhaps 200’ to capture the long angle of Point Betsie with Sleeping Bear in the background.

A gust suddenly disrupted the airflow over my left-wing and the airplane lurched into a spin turning left 180 degrees. I quickly thought “this is a very serious situation!” Thinking the implications of an accelerated stall, I carefully pulled out at an altitude somewhere around 35 to 50 feet above Lake Michigan. That probably represented one of the most dangerous and life-threatening aspects of the project. The STOL kit on the airplane perhaps enhanced the safety margin. That image or one similar is on the back of the dust-jacket.

So many people came forth, assisted and collaborated with my book, it is beyond my ability to recognize and thank them all—although I tried, especially in the credits and writing! Looking back over 20 some years, it was a great project—and life has been a great trip!

**In Finality**

A

 final comment on the photography and book. In my living trust, I have left the entire business collection of photographs (as opposed to personal) to the Clarke Historical Library at Central Michigan University in Mt. Pleasant, Michigan. They also have the printing plates for the book, and I expect they will accept my “traveling exhibit” of 120, framed lighthouse photographs and a percentage of remaining books to resell to fund any activities. In my absence, I wish them well!

**Other Flying Adventures unrelated to the Book!**

**Great Lakes Limited Edition USPS Stamp Print**

In 1995, the US Postal Service decided to issue a selection of stamps commemorating one for a lighthouse on each of the five Great Lakes. Those selected were Split Rock, Lake Superior; St. Joseph, Lake Michigan; Spectacle Reef, Lake Huron; Marblehead, Lake Erie and 30 Mile Point, Lake Ontario.

I conceived the idea of developing a limited-edition poster of all five lighthouses with the respective stamps affixed. My friend Dick Moehl was instrumental in that he participated in the selection of lighthouses. I learned of those that were selected and conceived the idea of developing a poster with the collection.

I had already photographed some of the images but one lighthouse I did not have a good photograph of was Split Rock on the western end of Lake Superior. I decided to make a special trip. Since the lighthouse faced the east, I wanted to be in a position to photograph it in a rising sun.

Examining the weather, I decided a passing front would give a clear view of the lighthouse the following day. I departed Michigan with my friend, Clara Lee Moodie, an English Professor at Central Michigan University in Mt. Pleasant, Michigan. We headed across Lake Michigan in IMC (Instrument Metrological Conditions) at 9,000 feet.

The flight was made in my newly acquired Cessna 172-L. It had only 1690 hours on the airframe and engine. As we reached the Wisconsin shoreline the weather cleared and nighttime was approaching, the destination was Grand Marias, Minnesota.

As we approached the shoreline of Lake Superior, I detected a declining oil pressure. As I scanned the instrument panel, it became clear I was losing oil pressure. About that time, Minneapolis Center turned me over to Duluth Approach Control. I advised Duluth that I was monitoring an oil pressure situation and would be deviating from my flight directly across Lake Superior and following the shoreline (better to land on rock than water)!

About this time the oil pressure dropped below the red line and shortly thereafter to zero. I advised Duluth that I had lost all oil pressure and needed an airport. The nearest was Iron River, Wisconsin about 20 miles south. They gave me a heading of 180 degrees. I reduced the engine RPM’s to about 1700 or so, to reduce the fatigue and pressures on the engine.

Duluth advised the Iron River had a PCL (Pilot Controlled Lighting) system on the Unicom frequency 122.8. After a brief period, I switched over to Unicom to activate the runway lights to give me a visual reference and heading to the airport. In the meantime, I was switching radios back in forth in my “new” airplane—of which I was rather unfamiliar—and still owned and flew my earlier 1968 Cessna 172. The radios in my “new 172” were a bit antiquated by then-current standards, with several switches to throw when changing back and forth to different frequencies—all in the dark!

I was advised by Duluth that the airport was five or six miles ahead. Again, back to the Unicom to activate the lights. I saw a somewhat lineup of five or six lights—and I thought I thought I’d seen some badly lighted runways, but this was the worst! Then I saw an automobile pass through the middle and decided this was not the airport.

Switching back to Duluth, I was advised the airport was within a mile ahead. I switched back to Unicom, clicked the mike seven times, and the whole runway lighted up below. What a welcomed sight that was! We completed an uneventful landing and was met by the airport manager and attendant, a retired Eastern Airlines Captain, who lived at the airport. I suspect Duluth might have contacted him. He directed us to a tiedown.

He had contacted the local motel and its restaurant and it remained open awaiting our arrival. In the small town of Iron River, news travels quickly. Everyone was aware of our “emergency landing” and scuttlebutt around the restaurant was that we had arrived!

The next day, I located a mechanic, Jon Messer, at the Duluth Skyharbor Airport and managed to meet him. We returned to Iron River to examine the engine oil screen and pan and it was filled with metal parts.

The engine was trash! The metal parts were spalled, the camshaft had lips and the piston pin plugs were worn down to the size of a nickel. Difficult to say how much longer the engine would have run, but failure would have been catastrophic. The piston would have broken, the connecting rod would have thrashed the casing and engine to pieces. The broken parts now adorn the top of my bookcase. How much time do I spend looking at oil pressure—and at what times—some have referred to it a psychic premonition!

I had anticipated replacing the Lycoming 0-320, 150 horsepower engine with an 0-360, 180 horsepower, but not this soon! So, I was on the phone buying a new engine from Air Planes in Wichita, Kansas, arranging the financing, shipping, etc. I called my hangar partner, Dave Wagner (no relation) and he flew his Piper Comanche into Iron River to pick us up.

In the meantime, the English Professor was scouring the town looking for a library and reading material. She was steered to the local drugstore where she found piles of paperbacks stacked along the walls three feet high. When I returned, she said, “John, this town has no library, has piles of paperbacks of which none are worth reading, has one church, three snowmobile shops, and five bars—you’ve got to get me out of here!!”

All the while I was purchasing and financing and shipping in a new engine making arrangement to get it installed and planning our return to Michigan! We laughed on many occasions our relative role in this escapade.

**Fuel, Fuel, Fuel!**

There is an old expression in aviation that “the only time you have too much fuel is when you are on fire!” I have never run out but have had a couple of uncomfortable encounters.

On one occasion I was ferrying a Lake Amphibian from Burlington Vermont to Lansing, Michigan. I departed Burlington on a fall afternoon with two or three sandwiches to stave off hunger. As I got up over the Allegany Mountains in Upper New York State, the headwinds became ferocious, perhaps in the range of 40+ MPH. My ground speed diminished to 70 mph or so. My planned fuel stop was Toronto Island Airport on the shore of Lake Erie. As I was beset with darkness, (and all three of my sandwiches were gone), fuel became an increasingly important consideration—making Toronto Island became of great concern.

I was approaching Trenton, Ontario which was supposed to have a lighted, General Aviation Airport. I approximated its location on the map but was unable to locate a rotating beacon. The lights from the air along that stretch of land 20 miles inland is just a continuous, phenomenal canopy of lighting! I could not identify an airport.

My next (and perhaps only) option was the Trenton Canadian Air force Base. At that time of the Vietnam War, they were very active. I called the tower and requested a landing clearance. They responded, “Is this an emergency?” In a typical General Aviation aversion to not wanting to declare an emergency and filling out the requisite paperwork, I responded, “No, but I’m going to run out of fuel if I don’t land!” I was given the appropriate landing clearance.

After landing, a fuel truck eventually showed up and an old, grisly master-Sargent hauled out his three-inch 100 octane hose and pumped my tank full in what seemed like 60 seconds. I approached the subject of payment, he replied, “I spill that much in a day!” I noted the quantity, which was 30 or 31 gallons and thought, “Gee, I guess I wasn’t as low as I thought!”

It was perhaps a couple of years later when again refueling in Canada and having to pay for my gas and noting the quantity, did it dawn on me that that he pumped Imperial gallons. I was precariously close to empty. I calculated 31 Imperial is 37.22 U.S. gallons. The Lake Amphibian holds 40 gallons!

It was early spring in 1965 when I was a sales-manager for Aero Marine at the Elkhart, Midway Airport. We had purchased a Cessna 180 on straight floats based at the Kalamazoo, Austin Lake Airport. I traveled to Austin Lake (not sure how I got there) to ferry the C-180 back to Elkhart. It was early spring of the year and the north-south turf runway was wet grass with a fair smattering of snow. We prepared the airplane for departure, probably gassing it up and other preparations. By this time a small crowd had gathered to watch this take-off in a floatplane on snowy wet grass.

The 80’ oak trees at the runway end were a bit of an obstacle. The Cessna 180 with a 230 horsepower Continental engine is a good performer. I had little doubt of its ability to get out of there (or my youth overcame good sense). The airplane performed as expected but I gave the crowd a good show clearing the trees by only a few feet!

I parked the C-180 in the Elkhart River for the night and the next day prepared the airplane for its trip to Houma, Louisiana for delivery to Hammond Flying Service, an offshore oil service flying company. I computed my fuel requirements and decided I could make Memphsis Downtown Airpark which was on the Mississippi River—a good stop.

Along the way, I decided to catch up with my old friend, Fritzy Klien, in Madison, Indiana and landed on the Ohio River. Fritz had purchased a T-28 when I was at Aero Enterprise a year earlier. I spent the night with Fritz and the next day invited him to take a “floatplane ride” around the area after which I departed for Memphis, Tennesee.

As time and distance rolled on, I became more aware of the remaining distance and fuel with increasing concern. I decided it smarter to land a floatplane with no power on the river rather than a cornfield, so I took an oblique angle to the Mississippi River. I’ve described earlier an FAA requirement that a fuel gauge accurately only shows empty only when it is empty. I did make Downtown Airpark uneventfully. I have no recollection of how much fuel I took on or how close it really was. In my fuel calculations, I neglected to count my half-hour tour around Madison with Fritzy!

**Landing Gear Issues**

I've never unintentionally “bellied an airplane in” (there's an old expression that there are those who have—and those who are going to), but I intentionally once had to land a Lake Amphibian with a “hanging gear.”

The Lake was manufactured in Sanford, Maine. The national distributor was Consolidated Aeronautics at the Elkhart Midway Airport in Indiana. We would pick up freshly manufactured, green (a moniker for the outside, green zink chromate corrosion preventative paint) airplane. We would ferry the airplanes to Elkhart then to Alabama where the top-coat paint was applied.

On one occasion another pilot picked up a green airplane in Sanford and ran into weather and parked it in Binghamton, New York. I was given the task of bringing the airplane into Elkhart. It was spring of the year with intermittent rain and snow showers. As I was pre-flighting the airplane I detected ice in the hull. The Lake has a tendency to take on water through the pylon or had water in the hull from a test flight.

In any event, I had the bright idea of removing the hull plugs, knowing the ice would have melted upon reaching Elkhart.

I departed Binghamton and after an hour into the flight, I became aware that I had lost all electrical—that the generator had shut down! I switched off everything electrical but there was virtually no battery left. Upon arriving at the Elkhart Midway Airport, I dropped the gear, threw on the master switch and the gear extended only about half-way.

The gear (flaps and trim) in a Lake are operated by an electric-hydraulic pump and accumulator. It has a back-up manual hand pump. I extended the handle and began to pump to no avail—it was inoperative!

I made a couple of passes over the airport and the boss, Al Alson, came out and observed. I had the bright idea of going over and landing on the Elkhart River saving the airplane from a forced landing on the belly. I dipped the wings a few times indicting my plan.

Somewhere along the way, fellow sales rep, Henry Dannis, came up alongside in another Lake and signaled the boss wanted me to bring it back to Midway and land it on the turf runway. That I did!

Here we were with a brand new airplane and two major problems each complicating the other—a failed generator and a defective backup/emergency hand pump. It was later discovered the hand pump had machine particles in the cylinder that cut the “O ring” rendering it inoperative. I once remember an ad in *Trade-A-Plane* for a Beech Bonanza, and the seller exclaimed: “And all the bugs are out!”

It only dawned on me sometime later that the hull plugs were in the glove box—and I might have sunk the factory new airplane in the Elkhart River!

The moral of this story for fellow aviators—when flying an amphibian never fly with the plugs out—you never know when you might need them!

**Appliance Buyers Credit Corporation**

**“ABCC”**

ABCC was a division of the RCA Whirlpool Corporation located in Benton Harbor, Michigan. It was the financing division of Whirlpool that floor planned their dealer inventory and financed retail sales. Bob Finch was a pilot, airplane owner and a Vice President in Whirlpool. He established an aviation financing division that floor planned (financing equipment while in a dealer’s inventory) aircraft for dealers across the country.

In about 1963 Bob was on final approach to the Benton Harbor Municipal Airport in his twin-engine Beechcraft Baron and had a fatal accident, landing in a golf course. I was never aware of any causal determination.

ABCC was a major player in the aviation world, floor planning airplanes across the US. Gene Cramer and Nick Rice were the two operatives in the office. We (RamsAir) would call Gene or Nick and say, “Gene, were are trading a couple of airplanes with Naylor Aviation (with offices in LA, Denver and Washington) and putting in our inventory a Twin Bonanza and a Cessna 310. Put in their inventory a D-18 and a 680 Aero Commander” and the floor plans would get juggled around, any money differences adjusted and the airplanes delivered. It was a pretty lose, “high-wide and handsome” activity!

Following this disruption in the corporate structure, the accounting firm, Ernest & Ernest started digging into the financial affairs of the division. Descrepencies appeared. Not all was as it appeared. Many airplanes were floor planed for an amount over their wholesale value, some were “sold out of trust” meaning the airplane was not paid off after the sale. The enormous task was undertaken to visit all the dealers and verify their inventory.

Major discrepancies appeared. Airplanes could not be located (they were out on a demonstration or charter) or they were not as described, many floor-planned for an amount exceeding their retail value. I occasionally flew Jack Morris (whose employer was unknown to me) who was tasked with viewing and verifying the condition of each airplane in a dealer's inventory.

I once flew Jack to St. Petersburg (as I remember) Florida to inspect Bernie Little’s inventory. Bernie was a Budweiser beer distributor and racer of unlimited hydroplanes As Jack checked out the airplanes, he came to a D-18, Tri-geared Twin Beech N???? on his list, floor planned for $XX. He couldn’t locate the airplane. Bernie said, “Oh, that’s in a hangar way down at the far end—too far to walk.” Jack said, “Well, I need to see the airplane and photograph it” (he was using a little Polaroid camera). When he got to the airplane, it was an old ex-military C-45 Twin Beech on conventional gear, not converted to a tri-gear, worth a fraction of the floor planed amount.

Our company was recruited to confiscate the inventory of other midwest dealers. I would always ask, “When will it be ours?” Sure enough, a short time later our airplanes also went to the Bloomington, Indiana (or Illinois) Airport. In all, some 240 airplanes were relocated there. In recent years I flew over that airport and had a recollection of it covered with airplanes.

It was reported (I did not see it) a *Wall Street Journal* headline read, “**ABCC Writes off 20 Million Inventory!**” That is even big by today’s standards. And, it was a time that preceded today’s big corporate jet fleet when an individual airplane could cost that much. Could we imagine what the equivalent would be in today’s dollars!