A Frozen Phoenix

A Paper for the Hopkinsville, Kentucky
Athenaeum Society
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World War II was just underway and president Franklin D. Roosevelt insisted that an invasion of Nazi-occupied France from England was a first priority. In preparation for this, American personnel and weapons, including planes, were being shipped across the Atlantic. However, a major problem was that German U-boats (submarines) were sinking the Allied tankers and freighters, many loaded with aircraft, at the rate of ½ million tons per month. In response to this situation Major General "Hap" Arnold developed a plan known as "Operation Bolero" that would now involve flying the planes from the U.S. to England over a northern route with stops to refuel at bases in Labrador, Greenland and Iceland. At that time the most important long-range aircraft were the B-17 bomber and the Lockheed Lightning P-38. The P-38 was a twin-engine, twin-boom fighter with two supercharged 1,300 horsepower Allison engines that produced a top speed of over 400 miles per hour. It had four 50 caliber machine guns and one 20 mm cannon in the nose. The Germans would eventually refer to it as "the fork-tailed devil". It turned out to be one of the most important fighters of World War II. Brigadier General Carl Spaatz, commander of the Eighth Air Force was put in charge of the operation which was a very risky one for the equipment and technology of that day. Arctic weather conditions could change quickly and drastically, going from clear skies to zero visibility and high winds in a matter of minutes, and weather forecasting was not very good then. Also, radio transmissions and compass readings were not very reliable in these northern latitudes so close to the Magnetic North Pole.

This part of the story is about a squadron that was only the 2nd one to be part of Operation

Bolero's missions. It was composed of two flights, known as "Tomcat Yellow" and "Tomcat Green," each including one B-17 and four P-38s. The squadron left Presque Isle, Maine, and arrived at Goose Bay, Labrador, on July 4, 1942. They were forced to stay there two days because of a heavy overcast, but then left early on July 7 with clear skies. It was now exactly seven months since the Japanese attacked Pearl Harbor. After a couple of hours some low-lying clouds were noticed below. A few minutes later the planes flew into a heavy mass of cumulus clouds that reduced visibility to less than twenty-five feet. The planes closed the formation tighter and climbed to 23,000 feet to get above the clouds but then saw more clouds rising to 30,000 feet and higher. They tried to fly around the clouds as ice began to form on the windshields. The pilots were not dressed for such below-freezing weather and wondered what was happening since they had been given a good weather forecast before they left. One of the B-17s developed a leak in the oxygen system and had to descend to 10,000 feet where the clouds were found to be more broken. It was very risky, keeping the planes less than twelve feet apart, but the other pilots managed to drop altitude also. However, by the time they got to 10,000 feet the weather had again gotten worse and they descended to 5,000, then 3,000 and finally to 2,000 feet. They decided to turn back. Tomcat Yellow and Tomcat Green had been separated in the process and each made decisions on which base to try to reach with their low fuel. Tomcat Green just made it back to Goose Bay and Tomcat Yellow made it to a closer base on the west coast of Greenland. Then on Sunday, July 12 Tomcat Green flew to a base, known as BW1, on the southern tip of Greenland where they had to wait two days for a storm front to pass, but on July 14 they were able to rejoin Tomcat Yellow at the other Greenland base, BW8. After only a few hours rest they were told to get ready to leave at three o'clock in the morning of July 15. Two of

the P-38s had to stay behind because of mechanical problems. They were to fly across Greenland, then across the Denmark strait to Iceland and eventually to Scotland. As they flew across Greenland at 12,000 feet a heavy overcast began to form and they climbed above it where the temperature was ten below zero. Then about ninety minutes beyond Greenland it was like Deja Vou – they hit a mass of cumulus clouds that forced them up another 2,000 feet. Tomcat Green tried to go down through a hole to look for better weather but it got worse and they managed to climb back up and rejoin Tomcat Yellow. They were now only one hour away from the Iceland base but another massive front lay ahead. They had to choose to try to turn back to Greenland. They reached a point that they could see the coast of Greenland between the clouds but the clouds then closed in more. They tried to climb above the clouds again but it was much like the previous week. When they were able to make radio contact with the Greenland base they had come from they found out it was socked in and that with the mountains near there, it would be impossible to safely make an approach. Some of the P-38s dropped down to look at the ice cap for possible emergency landing and by the time they climbed back up to the others a message was received that the base was now open. By now they had barely enough fuel to make it if they were lucky. They made their way through the clouds and after ninety minutes spotted the coast line. Soon they realized something was wrong. The ice cap extended to the water's edge which occurs in only two places on the west coast and they should not be anywhere near either of them. They soon realized that with the cloud cover and compass errors they had flown in a semi-circle over the ice cap and were now back at the east coast! They were now about two hours away from the base with only about twenty minutes of fuel left. A forced landing on the ice cap was the only choice. Lieutenant Brad McManus was the first to take his P-38 down. He was the

youngest of the group, had used more fuel than the others, and told them he was going down now while he still had full control of his airplane. Although a friend in another P-38 had advised against it, McManus decided to try to land with the landing gear down, knowing that if he could do it successfully the others would follow and they , hopefully, would be able to fly the planes out later when they could get fuel brought in. However, the snow pack on the ice was more than he bargained for and his landing gear jammed in the snow and ice flipping his plane over the nose—stopping upside down! The others watching thought surely he was dead but soon saw him digging his way out of the snow from under the wing. The rest of the planes of course came in wheels up, landing safely. The last of the P-38s to land was piloted by Lt. Harry Smith who had cut his engines at 200 feet, turned off the mixture control and feathered the props, hoping to reduce damage. He landed his plane so smoothly that he didn't even bend the props!

Since this was a ferry mission the planes were not carrying any ammunition, and before leaving home one of the P-38 pilots had opened the nose compartment where the ammunition is usually stored and had carefully packed in some bottles of whiskey. Immediately after the crash landing he ran to the front of his plane, opened the compartment and sniffed----"Thank goodness, I didn't break a bottle!" From this the crew had a little refreshment in the days to come. McManus's father had given him a Kodak camera just before he left home stating that, "perhaps you might see something interesting." This turned out to be a stroke of luck since McManus took many pictures of the downed planes with some showing just where they landed in relation to each other — information that would prove very valuable in the future.

After the landings they quickly started turning their planes, especially the B-17s into a survival camp as they prepared to deal with the elements and to try to make radio contact. To

keep the generators going and the batteries charged they were able to run one of the engines of a B-17. They sent out an SOS for three days without any response. Then late on the third day two transport planes were spotted and the men shot off flares. Planes flew over during the next few days dropping supplies and messages to keep them informed of the progress of a rescue team on its way from a weather station 100 miles to the north. The planes dropped food, clothing and alcohol, etc.. Then on the tenth day they saw the rescue team. They had hoped for sleds to carry them out but instead had to walk seventeen miles to the shore. After being led out of the area and reaching the shore they were then carried out in a small boat. For future reference in this presentation it is noted that one of the men in the rescue team was Sergeant Earl Toole. Eventually the men made it back home where they were soon re-assigned and sent off to hopefully finish out the war. The Air Corps did send a team back to the crash site to recover some vital instruments, such as the bomb sights, but they never did try to recover the planes.

The story now takes a quantum leap 38 years ahead to August, 1980. Richard Taylor was an architect in Atlanta, Georgia, and Pat Epps was an airplane dealer and operated a hanger at the DeKalb-Peachtree airport near Atlanta. They were both the adventuresome type who couldn't handle the urban life all the time. They had done such things as fly one of Epps's planes around the Caribbean and to South America, and another time through the Bermuda Triangle, and later to Mexico to visit a gold mine. This time, in August, 1980, they were flying a small Beechcraft Bonanza and had gone more than three-thousand miles north in pursuit of another obsession. They wanted to locate and then roll the airplane directly over the Magnetic North Pole. They located what they believed to be the spot and then each of them in turn rolled the Bonanza over the pole. After a few cheers they flew to an airport in Resolute, in the Canadian Arctic, to refuel

and were about to head for home when Epps said he first wanted to go to Narssarssuaq, a famous World War II air base in the mountains at the southern tip of Greenland. It would be fifteen hundred miles out of the way but Epps wanted to make what is considered a legendary approach to this airport. On the way they made an overnight stop at Sondre Stromfjord on the west coast of Greenland. At the hotel bar they were talking to a group of Danish pilots and airport staff, and the conversation was of course about flying. At one point they were talking about crash landings and being able to survive in the harsh arctic environment. Then someone mentioned, "The Lost Squadron"—six P-38s and two B-17s that had crash landed on the ice cap in 1942. Someone from the airport said that these planes had been seen on the ice cap as recently as the early 1960s, something I tend to doubt. Epps then recalled that a couple of years earlier two men with the last names of Rajani and Degan had asked him about the possibility of using his hangar to restore some World War II planes that they hoped to salvage from Greenland. At the time Epps was not interested, but now he began to wonder if they had been talking about the Lost Squadron. After they left Sondre Stromfjord they eventually did make it on down to Narssarssuaq and made their approach, pretending they were World War II fighter pilots. After they got back to Atlanta they at times would talk about the Lost Squadron, and even checked with the Danish embassy in Washington where it was learned that Rajani in fact had the salvage rights to the Lost Squadron. However, nothing more was done until early spring, 1981, when a wealthy businessman stopped by Epps Aviation and during conversation commented that he had always wanted a P-38. Epps said he knew where there were six. The thought of possibly recovering and selling such planes at a handsome profit prompted Epps to contact Rajani and to eventually work out a deal where they would work together on a project to try to recover the planes. From what Epps and Taylor had

originally heard, all they would have to do would be to find the planes, clean off a little snow and then get them out of there. They later found out that they were greatly mistaken!

On August, 1, 1981, Epps, Taylor, Rajani and Degan packed some camping gear, winter clothing, food and metal detectors in a plane and started out for Greenland. Rajani and Degan had put in a lot of time and money earlier researching the situation so Epps and Taylor put in $7,500 each toward the project, now known as Pursuits Unlimited. After arriving in northern Greenland they rented a Cessna ski plane and made their way to the sight. They used one of McManus's 1942 photographs to identify terrain features and confirm the spot. No signs of any planes were to be found and after digging and measuring some layers of ice they concluded that the planes might in fact be as much as forty feet below the ice, not on the surface! The instruments they had were not effective in locating the planes although after getting back to Atlanta they told the Atlanta Constitution that they did get strong readings. It was decided to return to Greenland in October to try to make a positive location of the planes before attempting to raise the substantial backing that would be needed for further efforts at recovery. However, bad weather canceled that expedition.

During further attempts to get financial backing, relationship problems within the team developed, with Rajani and Degan at one time trying to squeeze out Epps and Taylor. In 1982 while some legal problems were being dealt with, Degan and his son flew to Greenland with some radar equipment attached to the bottom of a plane but this effort also proved to be ineffective. In 1983, backing had been obtained by Rajani and Degan from R.J. Reynolds Tobacco Company and others to mount another expedition with a budget of $320,000. Epps and Taylor had been excluded from the team by now. In May the expedition left Atlanta under the

name of, "The Winston Recovery Team." There was much more equipment and many more personnel than previously. As with all of the expeditions sudden snow storms and winds presented serious problems and much of the equipment did not yield desired results. However, by late July a special subsurface radar device located two large metal objects and six smaller ones, and although the positions fit the known history they still did not have proof that these were the planes. With this equipment, estimates now were that the planes might be as much as two-hundred feet below the surface!

In 1984, yet another expedition, backed by a Texas tycoon, took further readings and observations. In 1985 another group, with Rajani's permission, made an expedition and estimated the depth of the planes to be at least two-hundred-fifty-eight feet but this was not confirmed. Keep in mind that each of these expeditions was quite involved and often costing hundreds of thousands of dollars each. Even though Epps and Taylor had now been out of the picture for a few years they had kept up with what had been going on and never lost interest. They had kept some contact with the Danish government and in 1986, since the others had not been very successful, they flew to Copenhagen and convinced the government that it was now time for someone else to have the salvage rights. They were then awarded the salvage rights, as "The Greenland Expedition Society," for a period of three years. They had to come up with tangible proof of finding the planes during that time. They were now back in the position of finding large sums of money to finance another expedition. They had heard of adventure travel vacations and managed to enlist enough friends and family at $5,000 each to take part in the adventure. This time they tried a couple of different instruments including a ground-penetrating radar device, but it turned out that the frequencies used would not penetrate quite deep enough.

The expedition turned out to be another failure, and with the money they had spent and the failure history of expeditions they wondered if they could continue. Just when they were about to give up, Epps attended a banquet at Robbins Air Force Base in Georgia, and while there a physician overheard conversation about The Lost Squadron and became very interested. The eventual result was that this physician recruited the backing of some other physicians, and along with another investor who joined in, the next expedition was on the way. In 1988 the expedition had been organized and they recruited the help of a former U.S. Army Corps of Engineers person who had experience working in such situations. He brought along some different radar equipment and a steam probe. They also had a global positioning system to pinpoint the location if they made a find. After considerable effort, the "Icescope" located a large metal object, large enough to be a B-17, and then work with the steam probe eventually confirmed contact at a depth of two-hundred-fifty feet! Further probes yielded a pattern that demonstrated that they had in fact found a B-17, even though this was as far as they could go for this season.

The 1989 expedition involved even more equipment such as a make shift drill that could drill out and retrieve a piece of the B-17 as proof of the find. There was also a device called a "thermal meltdown generator" that was to slowly melt a three-foot wide shaft. The steam probe, similar to the one from the previous year, was used to again locate the plane. The first three tries were misses but the fourth made contact. Then the hole was enlarged, and a pvc pipe inserted into which could be lowered the long shaft of the core drill which was successful in bringing up a piece of the plane about ½ inch in diameter. Proof positive at last! Only a few days remained but the use of the thermal meltdown generator was started. This device looked like a torpedo with a stainless-steel nose cone. Hot water was pumped into this device to hopefully melt a shaft down

to the plane. It melted down at the rate of about two feet per hour, but problems developed in keeping the cone going straight down and it jammed at seventy feet. They were able to get it free and bring it to the surface, and they were able to use the core drill to get another piece of the plane. This was at least enough to renew their salvage rights from the Danish government.

Before the next expedition in 1990 the meltdown device, now nick-named "the gopher", had been re-designed to ride down straight on a plastic pipe that had been inserted into the ice first. With this improvement it was possible to melt out a forty-eight inch diameter shaft two-hundred-fifty-six feet down to the B-17. Then using steam a large area was melted out around part of the plane, revealing the disappointing fact that the B-17 had been so crushed and broken by the ice that it was not in good enough condition to try to retrieve and restore! They did bring up a few souvenir pieces of the plane including a piece of the skin near the cockpit that had the name of the pilot's wife painted on it. Sometime later they found the pilot's wife still alive and while being covered by the NBC Today Show, they presented the piece to her. She, in turn, gave them the key to the airplane that she had kept all these years.

No expedition was planned for 1991. Epps and Taylor had almost given up again until they talked about the possibility that someone else might go up there and bring one or more of those P-38s out and restore it to fly. They had also considered that the P-38s being smaller were probably tougher and were likely in much better condition than the B-17s. These thoughts were enough to spur them on to start again trying to find sponsors. There were some very promising possibilities but all fell through. That is, until a former military jet pilot with a keen interest in aviation and a special fondness for P-38s happened to make contact. He also happened to be a millionaire who had read about The Lost Squadron and was interested in further efforts. His

name was Roy Shoffner and by February, 1992, an agreement had been reached. As a part of the new expedition team a corporate pilot with some experience on the ice cap, Bob Cardin, was signed on as project coordinator. Others joined the team with both Roy Shoffner and his wife taking part in the work of the project at the site.

Eventually the necessary equipment had been acquired and everything was in place on the ice to start the recovery project. The plan was to use the steam probes as before to find a plane and an improved version of the "gopher" to melt down to it. From the 1942 photographs of Brad McManus and the known history of how Lt. Smith had landed his P-38 with very little damage, it was his plane that they chose. Several steam probe attempts were necessary but then they did make contact with this P-38. As happened in previous expeditions, there were at times winds up to near seventy-five miles per hour and snow deep enough to bury the tents and equipment. Equipment was set up over the site and preparations were made to start using the improved "gopher" to melt the shaft down to the plane. Eventually the "gopher" melted out a shaft and then stopped with its top at two-hundred-fifty-seven feet down. When it stopped movement they knew they had made contact and excited preparations were made to repel down the shaft to take a look. Shoffner was all geared up ready to be the first to go down when Epps arrived on the scene from a trip. Shoffner insisted that Epps should go first and he would be right behind. They were very tense going down, wondering what condition the plane would be in. When they got down they found that apparently it had only some dents and was nothing like the B-17. Shoffner seated himself in the P-38 cockpit as Epps gave him congratulations!

Next came the task of using steam to melt out a cave all around the plane while pumping out the melted water. The sight of this P-38 sitting two-hundred-sixty-eight feet below the

surface after fifty years was awesome. Fortunately, they had hired a professional photographer for the expedition and shortly I will show you a picture of what that sight looked like. Now came the tremendous task of carefully dismantling the plane piece by piece and hoisting it to the surface. When it came to the main center section that included the cockpit it was necessary to use the "gopher" to melt out three more shafts all side-by-side to produce a shaft large enough to get this section out. Two notes of particular interest are that when they brought up the machine guns and the cannon from the nose of the plane, they mounted one of the .50 caliber machine guns and the 20mm cannon on a sled, set up a target and fired both guns with great accuracy! It was also discovered that the aircraft tires were still inflated with 1942 air! A special ceremony was held by the team to commemorate the recovery after fifty years to the day the planes went down.

Some of the parts of the plane that were brought up first were taken by some of the team to the famous air show in Oshkosh, Wisconsin, to be displayed prior to transporting them to Shoffner's hanger in his home town. A Sikorsky S-61 heavy-duty cargo helicopter was used to transport the center section of the P-38 to the coast where it was then loaded on a Danish ship and transported to Denmark. From there a freighter picked it up and took it to the docks at Savannah, Georgia. From there it was taken on a flat-bed truck to Shoffner's hangar where eventually all the parts were taken. Once in the hangar in October, 1992, all the parts of the plane were spread out and the task begun of taking everything apart to its smallest manageable piece, carefully labeling everything. Perhaps this is the time to mention that Roy Shoffner's hangar, which became a museum for others to come and see the restoration, is in his small home town of Middlesboro, Kentucky!

A significant part of the restoration was done by companies and individuals at no cost,

just because they wanted to be a part of such a fantastic project. For example, B F Goodrich Aerospace in England rebuilt the landing gear and brakes without any charge. The guns were restored in Nashville, Tennessee, where I understand they had been originally built in 1942. The engines were restored in Minneapolis, Minnesota. The plane had been assembled in 1942 in Lockheed's Burbank, California, factory. Since the plane was new and had not been assigned to a combat unit when it crash landed, it had never been named. It was therefore decided to give it the appropriate name of, "Glacier Girl". Throughout the restoration project, which went on for ten years, the hangar in Middlesboro was, as just stated, set up as a living museum, visited by many thousands. I am still amazed that with my history of flying since age fourteen and my continued interest in aviation, I had not heard of The Lost Squadron or Glacier Girl until, I believe it was September, 2002. It was at an Athenaeum meeting that I was fortunate enough to be sitting at the table with David Riley when I heard him talking about the story and his having been to the museum in Middlesboro. I immediately started gathering what information I could, including finding their internet site. Then with another stroke of luck we had a vacation trip planned with some friends to go to the Smokies in late September and early October. I, of course, made arrangements to go by way of Middlesboro where I got to see Glacier Girl almost completely restored and got to talk to the project manager, Bob Cardin. I was greatly excited to learn that the first test flight for Glacier Girl after restoration was schedule for October 26, 2002.

My next-door neighbor, also a flying enthusiast, and I immediately started making plans to attend this historic event. Of course no accommodations were available in Middlesboro but we did manage to get a room in Corbin so we could get to Middlesboro early in the morning. News media and others around the country had been notified of the event and it was estimated

that probably at least twenty thousand people would be present. The ceremonies were scheduled to begin at 2:00 P.M. and we arrived at the airport at 9:00 A.M.. Others were already there, one family we talked to having arrived about 4:30 A.M.. (Pass out sets of pictures) When they rolled Glacier Girl out of the hangar prior to the opening ceremonies this completely restored P-38 was over 80% original and looked just like it did in 1942 -- a beautiful sight. There were quite a few people present who had been associated with this story in one way or another. There were several World War II pilots, some of them P-38 pilots, who were next to us in the crowd. We were fortunate to be very close to front and center. I saw Sgt. Earl Toole who had been a key person in the rescue team that led the Lost Squadron pilots off the ice, and somewhere close by were Epps and Taylor. Lt. Brad McManus, the P-38 pilot who had landed first, gear down, and flipped over was there and of course also Bob Cardin, Roy Shoffner and his wife. Lt. Smith, the pilot who landed his plane so carefully, the plane that is now Glacier Girl, died in 1981. Roy Shoffner had had some physical problems, I think knee replacement surgery, in addition to his age, and had to be helped to the microphone to make his welcome comments. When I talked to Bob Cardin later, it was sad to learn that with his condition, Roy Shoffner had not even been able to sit in the cockpit of Glacier Girl since that time he did while still under the ice. Also in the crowd were various news media persons, including a team from The History Channel, filming a documentary on the event. Perhaps some of you saw this a few days ago when it was broadcast on March 3rd and 4th.

After the opening ceremonies it was time to start the engines which led to a great cheer from all around. Glacier Girl then started her taxi down the runway to prepare for take off, again amidst great cheers. When she broke ground and started flying for the first time in sixty years the

excitement was so great that my video camera was shaking! The cheers were still going as she climbed out. She then made a couple of passes over the crowd, including one low one which brought on still more cheers. As planned, the total flight lasted about thirty minutes before a beautiful landing was made and the pilot rolled Glacier Girl to a stop right in front of us. As the pilot got out of the cockpit he paused and gave Glacier Girl two big salutes. A fitting end to a day long dreamed of.

A later report estimated that there were, in fact, twenty-five-thousand people present for this historic event. Originally the hopes were to eventually fly Glacier Girl in a few air shows and then fly her over the originally intended 1942 route to Greenland, Iceland and on to England. However, I heard that the extreme insurance costs would probably prevent this from taking place. A new museum is now being constructed at the airport in Middlesboro which is planned to be a permanent home for Glacier Girl. There were ten-thousand-thirty-two P-38s built at the Lockheed plant in Burbank, California. Today there are only twenty-five known to exist in the world, with only six of these, including Glacier Girl, in flying condition. There are still two B-17s and five more P-38s up there under the ice. Anyone interested?!