

Preface and Overview
Why not a
“Great Lakes Super Challenge or Race”
From Chicago to Buffalo?

In 2005 I suggested that GLSS sponsor a race from Chicago to Buffalo. It would be a race of 800 miles through 4 lakes and 2 rivers. At the time it would have been the longest race in the Great Lakes. It would include passage through Lake Michigan, Lake Huron, the St. Clair River, Lake St. Clair, the Detroit River and Lake Erie. Then the longest race in the Great Lakes was the Super Mac which was 517 NM. At 79 miles the restricted waters of the St. Clair River, Lake St. Clair, and the Detroit River offered some unique challenges but with good planning and the use of modern technology, these challenges can be overcome.

I was given many reasons why this could not be done, so with that as a challenge I set out to demonstrate the feasibility of such a race, and sailed from Chicago to Buffalo, nonstop, singlehanded late in the summer of 2006. The trip took 8 ½ days. The rivers portion took 12 hours and crossing Lake Erie proved a challenge with large waves and gale force winds on the nose. To the best of my knowledge, this is the first time anyone has sailed nonstop, singlehanded from Chicago to Buffalo.

The GLSS did not take my suggestion, but I am told partly based on my suggestion did initiate the Super Mac and Back from both Chicago and Port Huron in 2006. I completed this race of 1034 NM in that year.

In 2013 I again submitted a proposal to sponsor an individual personal challenge along these same lines.

This paper includes material from these proposals. But more important it documents the planning for such a passage and my 2006 experience in sailing from Chicago to Buffalo – singlehanded, non stop.

Bill Tucker

“Great Lakes Super Challenge or Race” from Chicago to Buffalo

Prepared by Bill Tucker

Introduction

The purpose of this paper is to ask GLSS to consider sponsoring a singlehanded challenge from Chicago, Illinois to Buffalo, New York. It would pass through 4 lakes and 2 rivers. These would include Lake Michigan, Lake Huron, the Saint Clair River, Lake Saint Clair, the Detroit River, and Lake Erie. GLSS now sponsors Solo Challenges in each of the Great Lakes. This would be a personal Challenge and not a race. It could be started at any time one felt was best and could be attempted as many times as one desired. It would be the longest challenge in the Great Lakes with separate start and finish. It would also add an interesting new challenge with the added navigation of the St. Clair and Detroit Rivers and Lake St. Clair. This challenge would be a Great Lakes Super Challenge in all respects. This paper discusses a number of issues associated with such a challenge.

To demonstrate the feasibility of such a challenge and to better understand the issues I completed a singlehanded, nonstop sail from Chicago to Buffalo between August 25, 2006 and September 3. This voyage is described in more detail in Appendix A. Appendix B provides a number of specific suggestions for anyone attempting to sail this course singlehanded.

Basic Concept

The following is a brief discussion of the challenge concept:

- **Course**

The course would follow the normal course used for the Super Mac from Chicago to Port Huron. The St. Clair and Detroit Rivers and Lake St. Clair require significant study and preparation on the part of a skipper before attempting to sail this part of the course. In general, it is suggested that the various course choices be left to the skipper. In some cases, it might be appropriate to set turning marks at locations where there is shallow water to prevent shallower draft boats from cutting the corner and getting an unfair advantage. The following is a general discussion of the course one might take:

1. Follow the St. Clair River main shipping channel. In some cases, one must avoid shoal areas. One can go either side of various islands, though the main shipping channel is always shorter.
2. As one approaches Lake St. Clair, one could take either the St. Clair Cutoff or the South Channel. The South Channel is longer, but if the wind is directly up

the cutoff the South Channel might be the better choice. This is an example of a choice that should be left to the skipper.

3. In the lower part of the Detroit River, the Livingston Channel is the down bound channel. This channel is very narrow and the sides tend to block the wind. One should therefore take the Amherstburg Channel. There is plenty of room to maneuver in this channel and to avoid up bound traffic.

- **Challenge Management**

A challenge manager similar to a Race Chairman or Director would be assigned to manage the different aspects of the challenge. He could be assisted by others as a Race Chairman is assisted. He would be responsible for developing a “Challenge Directive” similar to the Notice of Race and Sailing Instruction. He would also mentor and advise potential participants and monitor participant progress during their voyage and arrange for appropriate awards upon completion.

- **Length**

The Super Challenge length would be approximately 800 nautical miles long. This is second only to the Super Mac and Back in length. Although the challenge would be fairly long, one would always be within a half day sail or motor of a harbor of refuge if needed.

- **Qualification**

It is proposed that the only qualification be that a challenger be a member of GLSS.

- **Rules**

The portion of the course through the two rivers does provide some unique challenges especially when sandwiched into a much longer challenge. Some of these issues are discussed in the “Issues” section below, however it may be necessary to lay out some new rules or expand existing rules to deal primarily with light wind situations combined with other situations such as the current, shipping traffic and a tired sailor. The following are three rules that might address some of these situations from entry into the St. Clair River until the exit from the Detroit River:

1. The skipper must sail his boat in a manner that does not interfere with commercial shipping traffic that is confined to the shipping channels in these areas. Any interference will constitute grounds for disqualification. (This is similar to current rules in the St. Clair Solo race.)
2. Although the challenge intent is to complete the course without anchoring if possible, a skipper may anchor his boat outside the shipping channel if necessary due to lack of wind, poor visibility, fatigue, or similar circumstance. Anchored time must be logged and reported to the challenge committee at the

completion of the challenge. Anchored time will count as challenge time and no penalty will be added.

3. If necessary to avoid commercial traffic or grounding, due to light air for example, a skipper may use his engine. If this is necessary the skipper must return to a point at a latitude above or north of the point where he started his engine and continue to sail from that point. Such engine use (including reason, duration, and location) will be logged and reported to the challenge committee. The challenge committee will review any engine use to be sure it is consistent with the intent of the challenge. (The rivers run from the north east to the south west so returning above the latitude where the engine was started gives the skipper some flexibility in retracing his course, but still mandates that the course essentially be completed under sail.)

- **Handicap System**

As this is a personal challenge no handicap system would be used. For record purposed actual times of completion would be maintained as records of interest.

- **Tracking and Records**

Challenger would be required to use SPOT or some similar tacking device. He would also be required to maintain a log which would be submitted to GLSS upon completion for review certification of successful completion.

- **Challenge Application and Cost**

The Challenge rules, equipment list, and application would be similar to those used for current GLSS races. A onetime fee and cost would be submitted. An appropriately long time for completions such as five years would be allowed. The cost would cover GLSS administration and awards. The applicant could attempt the challenge at any time during that time period and make as many attempts as he wished.

- **Awards**

It is suggested that the award might include a brass medallion and a framed certificate but not a flag as this is not a race. The medallion might be an oval with all the Great Lakes and the route. Similarly a framed certificate might record participants name, boat name, course description, and time to complete. It might also indicate if the course was completed nonstop or not. These would be awarded at the AGM.

Issues

Such a challenge would be unique both in its length, at least as a Great Lakes challenge, and due to the various factors associated with the two rivers that must be navigated. Several of the following issues that have been brought up by various sailors:

- Challenge Duration

At 800 nautical miles this challenge would be the longest challenge from different starting and finish points in the Great Lakes. The following table illustrates approximate distances for the various legs:

Leg	Course Distance (NM)
Lake Michigan (to Mac Bridge)	279.80
Lake Huron (from Mac Bridge)	237.30
St. Clair River	35.27
Lake St. Clair	12.73
Detroit River	30.75
Lake Erie	203.20
Total	799.05

It would take approximately 8 to 10 days for a 30 foot boat. As discussed in Appendix A, I completed the course in 8 days and 18 hours. This is considerably shorter than many of the ocean challenges that are currently being run. Unlike most ocean races one would always be within 6 to 12 hours or a harbor of refuge if necessary due to weather, equipment problems, or if one should determine that he is not adequately prepared to complete the voyage.

- The Rivers

“The Rivers” section consisting of the St. Clair River, Lake St. Clair and the Detroit River represent a 79 nautical mile portion of the course. Sandwiched into the middle of a long distance challenge the rivers provide some unique challenges. These challenges can be met with the application of good seamanship, proper planning, and the use of available technology. The need for proper planning in any singlehanded venture is important, but is particularly important to address the challenges of this portion of the challenge. The issues here include river current, freighter traffic, restricted channels, night time river navigation, wind direction, and more important very light or no wind. Although individually each of these issues can be addressed, combinations of these issues can make this a very challenging portion of the challenge. Each of these issues is discussed in more detail below:

- River Current

In the two rivers one would get approximately 1.6 Kt boost from the river current. At either side of Lake St. Clair near the river entrance and exit one would get a small

boost of as much as .5 Kt thought this is much less significant. The course was selected to be in the direction of the current which give all the boats a significant boost especially if one is able to stay in the middle of the rivers where there is maximum current. In a situation of little wind the current could cause one to go aground and it may be necessary to anchor at the side of the channel until the wind picks up. If one does go aground, the current will tend to push one hard aground making it difficult to get off even the help of an engine.

- **Freighters & Commercial Traffic**

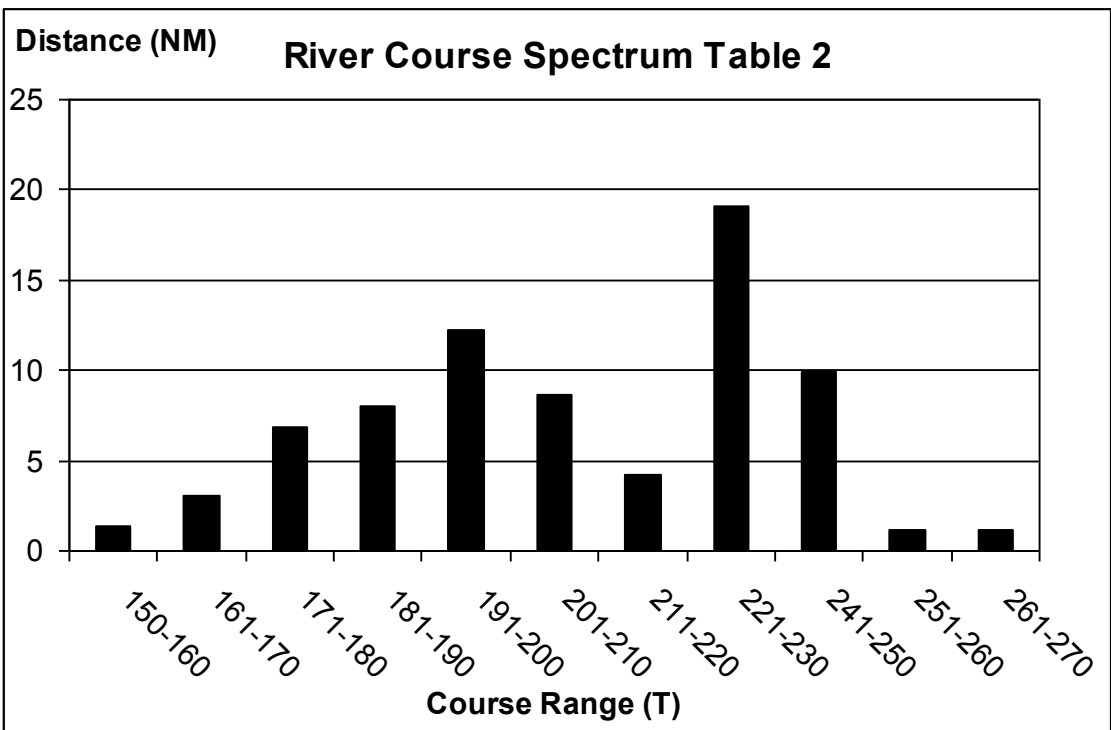
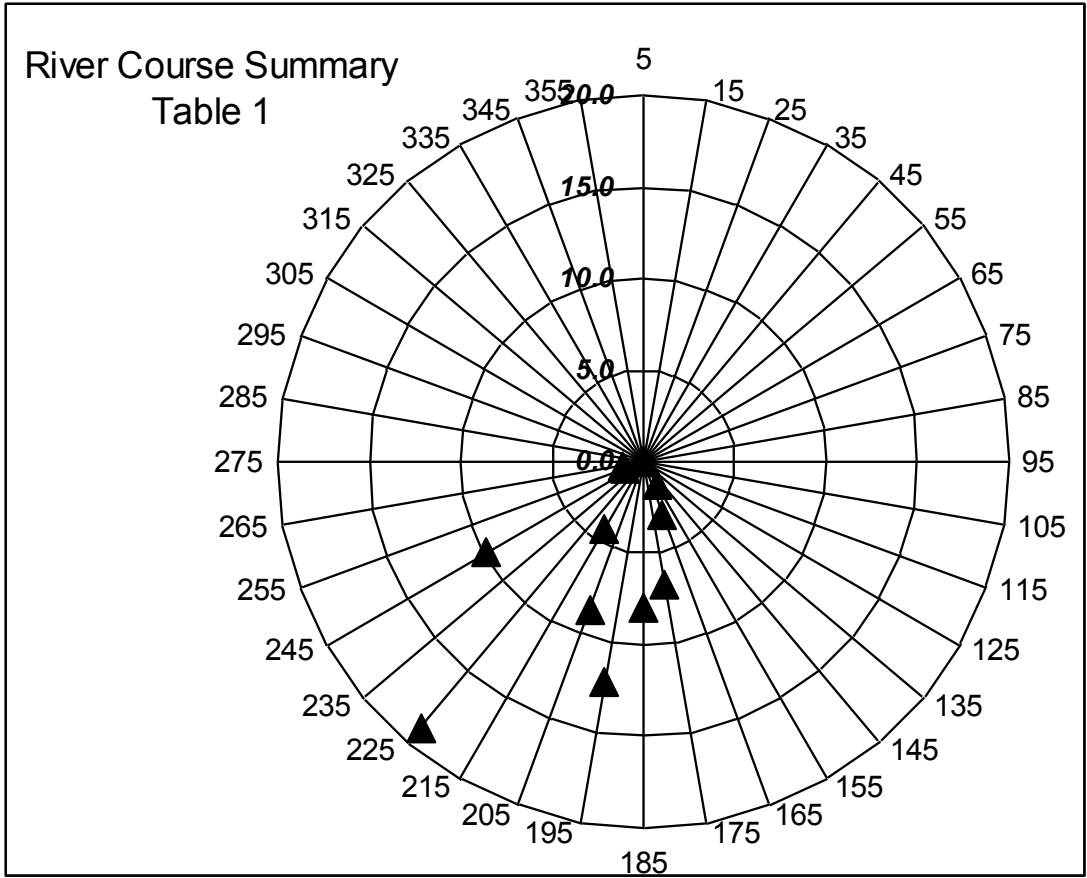
Freighters and commercial river traffic have the right of way and can present a challenge. One can expect to meet or be passed by 6 to 12 freighters in the course of transiting the rivers. In most places, there is plenty of room and one can easily move over to the edge of the channel it needed to accommodate two passing freighters. At night it is important to be able to recognize and understand the lights of both freighters and tugs and barges. Familiarity with the river charts should be acquired before entering the river. The use of a GPS chart plotter in the cockpit to help determine the sides of the channel can greatly assist in dealing with river traffic. It may also be appropriate to talk to the commercial vessels using VHF to be sure he understands one's intentions and visa versa. In the rivers, it is just as important to keep a frequent watch for freighters coming up behind as ahead especially if one is trying to stay in the center of the channel to take maximum advantage of the current. It is amazingly easy for a freighter to sneak up on you if you are not looking over your shoulder frequently.

- **Night**

Running through the rivers at night can be particularly challenging particularly if there is light wind or the wind is on the nose requiring one to tack down the river. It will be necessary to both avoid freighter traffic and tack against the wind without going aground on the sides of the channel. The navigation lights can be difficult to follow even under ideal conditions. In many places, the available sailing space is restricted to the shipping channel but in others there may be considerably more room in which to tack into the wind. A key tool for dealing with this situation is a chart plotter located in the cockpit.

- **Wind Direction**

The basic direction of the rivers portion of the course is to the southwest. Table 1 shows a polar plot of the sum of the course segments grouped by 10 degree increments. The radius to the points represents the sum of the course in that direction in nautical miles. Table 2 shows the same information in a bar chart format. If the wind is from the southwest direction it will be necessary to tack down the river for at least some of the course. Even in this condition, there may



be some stretches where it will not be necessary to tack. Again it is important to be familiar with the river charts. A chart plotter in the cockpit is also an important asset.

Even with contrary winds the river current can be counted on to give a boost of 1 to 2 knots.

- **No Wind**

The most difficult and frustrating wind condition to deal with is no wind. Under these conditions the current may force the boat aground or into the path of a passing freighter. In these conditions, it may be necessary to use the boat engine to get out of the way and it may be necessary to anchor until there is adequate wind to continue in a safe manner. Challenge rules for dealing with this condition are discussed above.

With reasonable wind one should be able to complete this section of the course in a long “day”. Obviously little sleep would be possible except possibly in Lake St. Clair unless one tied up or anchored. Although each of the issues above can easily be handled a combination of several issues may make this portion of the challenge very challenging. Although the goal is to complete the challenge without anchoring, with very light winds this may not be possible. There may be some years where light winds make it impractical to finish the challenge as one might desire. Dealing with these issues will make this challenge challenging, rewarding, and frustrating at times.

Tracking

A participant could be required to carry a SPOT and to send an “I’m OK Message” every 6 hours as a safety measure. A GLSS Challenge Chairman could be added to the SPOT message list and could then monitor the challenger progress. If say 2 6 hour messages were missed the Coast Guard could be notified. This would provide a safety factor similar to that achieved with the traditional Solo Challenge 6 hour call in. The SPOT tract would also provide a record and verification of actual course completion.

Preparation

Preparation is always key to a successful singlehanded challenge for the participants.. This challenge will have some unique aspects that make it different from other Great Lakes challenges, singlehanded or otherwise. It may be appropriate to prepare a briefing booklet or paper for prospective participants, including the course, and some of the material included in this proposal and in Appendix A and B. This will help to pass on the best available advice, and help to assure that participants have the best chance of completing a successful challenge.

Challenge Name

Undoubtedly one of the most important aspects of planning and sponsoring such a challenge will be choosing a name. This activity will undoubtedly occupy the most board time and cause the most controversy. What ever name is chosen, there will undoubtedly be some who will not like it and want it changed. It might be possible to hold a contest to name the challenge. In any case my humble submission to the name contest would be “The Great

Lakes Super Challenge”. In all aspects it will be unique offering both challenge and opportunities beyond any current challenge on the Great Lakes.

Summary

The proposed challenge would truly be a super challenge for the following reasons:

- It would include passage through 4 lakes and 2 rivers
- The rivers portion would offer a unique challenge
- It would be the second longest challenge in the Great Lakes
- This challenge is the longest between two separate points.

Just completing this challenge would be a major accomplishment that any sailor could be proud of. Many with the time and resources will take this on as the ultimate Great Lakes Challenge just because it is there. To those that say why undertake such a challenge. I can only reply: “Why not?”

Appendix A

Summary of Voyage from Chicago to Buffalo, Singlehanded, Nonstop in August 2006

Introduction

On August 25, 2006 at 18:31, I passed through the breakwater at Chicago and started on a unique adventure: a singlehanded, non stop voyage from Chicago to Buffalo in my 30 ft. sloop GL³. On September 3, 2006 at 12:17, I passed through the outer breakwater at Buffalo, having completed the voyage in 8 days, 17 hours, and 46 minutes. The course as laid out on the chart was 799 nautical miles, but at the destination my log indicated I had traveled 946 nautical miles. To the best of my knowledge this is the first time anyone has sailed singlehanded, nonstop from Chicago to Buffalo.

Why do it?

In 2005 when we did the Great Lakes Singlehanded Society (GLSS) Trans Superior Solo, we were told that it was the longest challenge in the Great Lakes. We all knew better! The GLSS Super Mac from Chicago to Port Huron or visa versa is in fact the longest challenge in the Great Lakes. In looking at the chart, I thought a longer challenge would be possible from Chicago to Buffalo. As I discussed this crazy idea with various GLSS members, there was little enthusiasm for such an idea. Responses included: “to long”, “to expensive”, “to difficult to navigate the rivers”, and “no one would sign up for that sort of challenge”. To get a feeling for what the issues might really be I decided to go for a sail and give it a try myself. In discussion with various people, I discovered that the idea of such a challenge had been discussed for crewed boats, but had never been implemented.

Such a challenge would cover 4 lakes, 2 rivers, for a distance of 800 miles. It would, without question be the longest challenge in the Great Lakes, the longest freshwater challenge in the world. Navigating the St. Clair and Detroit Rivers would add an interesting challenge unique to any long distance challenge. If combined with the GLSS Mac and Super Mac it would really be 3 challenges rolled into one. It would literally be the Vendee Globe challenge for fresh water sailors. Such a challenge would undoubtedly be an irresistible personal goal for many freshwater singlehanded sailors.

The Big Picture

Although the course was about 800 miles, it would take another 800 miles of travel to get to and from the starting and finish points. I had planned to take about 3 weeks for the entire project. I spent considerable time planning and preparing the boat for the voyage.

About a week before I set out on this adventure, I was day sailing with a friend in the Detroit River near Belle Isle. We were having a good conversation and I was not paying much attention to depth. We went hard aground in the shallow area across from the western end of Belle Isle. It took a about 30 minutes of struggle to get free, using the engine, as well as full sail to keep the boat heeled over. The strong river current made it more difficult. Somewhat

embarrassed, I thought to myself that this experience was a good object lesson before attempting my singlehanded, nonstop voyage. Such a stop would have spoiled my effort.

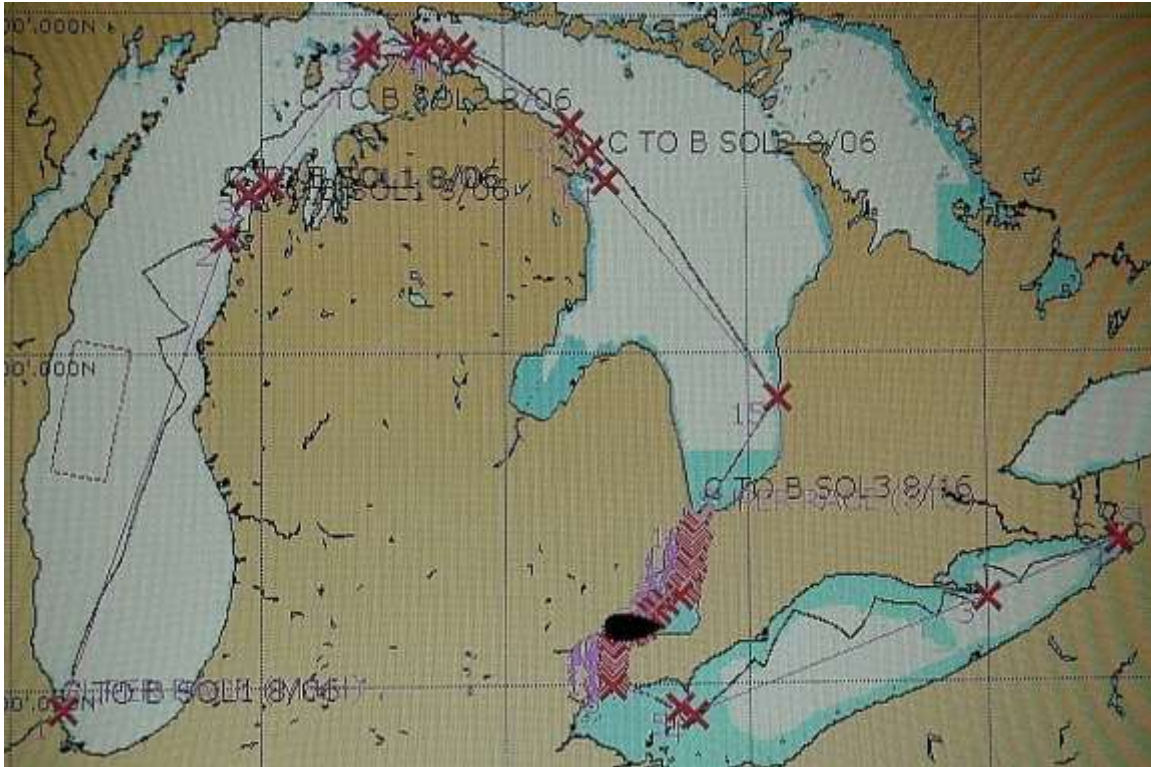
The course, 800 nautical miles, when considered against many salt water singlehanded races is quite modest in length. The truly unique aspect is dealing with the 73 nautical miles of restricted water associated with St. Clair River, Lake St. Clair, and the Detroit River. These waters would be a challenge that would be encountered toward the end of the course and would require much more personal effort than the open waters of the larger lakes. Much of my preparation involved preparing for this portion of the voyage.

The trip is described in more detail below but summarized in the following table:

Leg	Course Distance (NM)	Log Distance (NM)	Duration (Hours)	Duration (Days, Hours)	Average Speed Made Good (Kt)	Average Speed per Log (Kt)
Lake Michigan	279.80	328.20	92.98	3d 21.0 hr	3.01	3.53
Lake Huron	237.30	274.30	42.67	1d 18.7 hr	5.56	6.43
St. Clair River	35.27	26.68	5.17	5.2 hr	6.82	5.16
Lake St. Clair	12.73	12.70	2.25	2.3 hr	5.66	5.64
Detroit River	30.75	23.27	4.50	4.5 hr	6.83	5.17
Lake Erie	203.20	281.00	62.53	2d 14.5 hr	3.25	4.49
Total	799.05	946.15	210.10	8d 17.8 hr	3.80	4.50

(Note: St. Clair River, Detroit River & Lake St. Clair log distance split estimated.)

The following photo shows the track as recorded on my chart plotter. The intended course is also shown as the obviously straight lines. The periods of tacking in the northern part of Lake Michigan and across most of Lake Erie are obvious.



GL3 – Chicago to Buffalo – Chart Plotter Track

Getting Ready

Preparation for the trip involved working through a list of several dozen improvements and fix-it items. A major portion of this effort was devoted to preparing for the rivers portion of the trip. In particular, I reviewed extensively the charts for the rivers so I would be familiar with where I had room if needed to tack down the river. I marked up chart 14053 to show exactly which cuts in the rivers I intended to take and labeling the end of each page with the next page number. This effort was intended to minimize my having to fumble through the charts and allow me to concentrate on maneuvering the boat in the rivers. I also loaded a complete set of way points into my chart plotter for the entire course to assist in navigation. I considered mounting my chart plotter in the cockpit. It could be seen fairly easily from the cockpit so I decided to leave it in position at the chart table. When I run this course again I will move it to the cockpit. These preparations are described in more detail in Appendix B below.

Detroit to Chicago

On August 19 at 1040 we, that is GL³ and I, got underway from the Edison Boat Club headed for Chicago 565 nautical miles away. At 2103 we passed under the Blue Water Bridge at Port Huron and entered Lake Huron. Wind and waves were on the nose so we continued to motor. During the night of the 20th the bow anchor locker was found to be full of water so we went into Port Sanilac at 0235 to refuel and to tape the locker shut. Leaving Port Sanilac at 1050, we continued north under engine power against heavy waves and wind. Later in the

day, the wind and waves subsided and GL³ continued north at about 6 knots. Early in the morning of the 21st, the engine was shutdown and we continued under sail for about 8 hours before starting the engine again after the wind died.

We arrived at Mackinaw City just after midnight on the 22nd of August. The boat was fueled at the fuel dock just after it opened and we departed at 0805. At 0825, we passed under the Mackinac Bridge and entered Lake Michigan. The trip down Lake Michigan alternated between sailing and motoring. In the upper part of the lake, a small yellow bird took up residence on my boat. He tried a number of perches including the tiller and a brief stay in the cabin. I explained that this was to be a single handed endeavor. Although I wasn't sure he understood the singlehanded concept, he graciously obliges by flying off into the Chicago skyline as we entered Chicago harbor. The last 50 miles was against head winds and waves on the nose. At 1437 on August 24, we passed the Chicago Harbor break water and at 1500 were tied up snugly against the pier at the Columbia Yacht Club. The trip from Detroit to Chicago had taken just over 5 days and 4 hours.

Lake Michigan

It had originally been my intention to stay in Chicago for 2 or 3 days to provision and rest. The weather man indicated that if we left immediately wind would be more favorable before moving around on the bow. So with just a 27 hour stop, we got underway from the Columbia Yacht Club at 1800 on August 25th. At 1831, GL³ passed the Chicago Harbor break water



Stowaway!



GL3 at Columbia Yacht Club in Chicago



The Start: Passing the Chicago Break Water

and light house under sail headed for Buffalo at a relaxed 1.7 knots with the wind on the port quarter. In spite of the slow start during the first 24 hours, we covered 111 nautical miles. About half way up the lake, off Little Sable Point, the wind shifted to the nose and it was necessary to tack into the wind. As we approached Sleeping Bear Point toward the middle of the afternoon of the 27th the wind died down and we spent most of the next 12 hours with little wind drifting at a knot or less. I had intended to cut through the passage south of the Manitou Islands, but with the fickle wind wound up going to the west of these islands, and then cutting back toward the passage by going north of North Manitou Island. This portion of the passage was very slow at speeds of 1 to 2 knots. At 0840 on the 28th, we finally passed Grays Reef Light. After passing Grays Reef Light in very light air, we headed to the east just north of the shoals in the area. The wind died even further and I worried for a while that the current was going to take us aground. The wind finally picked up and we passed under the Mackinac Bridge doing a delightful 4.3 knots at 1510 on August 29th.



Approaching the Mackinac Bridge

After a fast start, it had taken 3 days and 21 hours to go from bottom to top of Lake Michigan. One lake down and 3 to go! We were officially in Lake Huron.

Lake Huron

Lake Huron started as a nice relaxed sail past Mackinac Island on the afternoon of August 29th. I tacked to get around Bois Blanc Island. Gradually the wind picked up and by midnight we were doing 5.2 knots and still increasing with wind on the port side for a close reach. At 0115 on August 31 just outside the Godrich Harbor we turned toward Port Huron making 5.9 knots. During the run to Port Huron, where I knew there would be little shipping traffic, I made a point of getting some sleep in preparation for the river run where sleep would be impossible. At 0950 on August 31, we passed under the Blue Water Bridge at Port Huron leaving Lake Huron Behind and entering the St. Clair River. Two lakes down and two to go! Crossing Lake Huron had taken 1 day and 18.7 hours for an average speed over the bottom of 5.56 knots. What a great sail!

Two Rivers and a Lake

Now the interesting part of the trip was beginning. Conditions couldn't have been better with a nice stiff wind of about 20 knots from the northeast to push us along the course that was mostly to the southwest. Before entering the St. Clair River I moved snacks and charts up to the cockpit for easy access. In the St. Clair River we moved along at speeds ranging from 5

to 8 knots over the bottom according to the GPS. Boat speed through the water was 5 to 6 knots with a push from the river current of 1 to 2 knots. I stayed in the middle of the river to maximize the push from the current. In the St. Clair River, we passed only 2 freighters.

At 1500, we entered Lake St. Clair and continued down the lake just outside the shipping channel. In the lake, we passed a 3rd freighter. At the south end of the lake I contacted John Holt at Edison Boat Club and he brought Ron Zimba, Dennis Turner, and John Solden out to meet me in his sailboat Audacity. He motored along beside me for a few minutes while we exchanged greetings and a bit of trip travel log. Ron took a cell phone photo of GL³. As they departed at about 1715 we were headed out of Lake St. Clair and into the Detroit River.



**GL³ entering the Detroit R.
Photo by Ron Zimba**

In the Detroit River, good wind continued to push us along as before. At 1832, we passed under the Ambassador Bridge in Detroit. In the lower part of the Detroit River, the sun went down adding to the navigation challenge. The GPS chart plotter proved to be an invaluable asset and greatly assisted in keeping the boat in the channel, especially in areas where there appeared to be lots of water much of which was not very deep. In the narrow Amherstburg Channel, the winds died and boat speed was only a couple of knots making navigation more interesting. At 2145, we passed the Detroit Light leaving the Detroit River behind and entering Lake Erie.



Detroit Skyline from GL³

The rivers portion of the trip had been completed in just less than 12 hours. The winds had been great making the trip relatively easy. The last few miles of narrow channel were completed in the

dark and proved to be more of a challenge. My preparation had paid off. No doubt my going aground in the Detroit River several weeks before had been a good object lesson on the need for constant vigilance!

Nasty Little Lake Erie

With the rivers behind us, I figured the hard part was over, but Lake Erie proved to be more of a challenge than I expected. After passing the Detroit Light at 2145, on August 31, I headed east toward Pelee Passage. Due to the heavy shipping traffic in this area, I knew that

a nap was out of the question until I got well clear of Pelee Passage and the shipping lanes. The first few hours were a nice sail with the boat close hauled and a 20 knot wind. The wind quickly picked up and moved onto the nose. To get past Pelee Passage, I tacked south close to Pelee Island. At 0510 on September 1, we were well past Pelee Passage to the south.

With apparent wind speeds of about 20 knots on the nose we continued to tack down the lake. By the morning of September 2, wind speeds had increased to over 30 knots and were still on the nose. The weather man stated that waves were 10 to 14 feet. Winds for 2 days were over 30 knots on the nose. The highest wind speed I saw on my wind instrument was 42 knots. I tacked up toward the north shore of Lake Erie hoping that the shore would

provide some reduction in the fetch and thus the wave height. I put 2 reefs in the main and rolled my genoa down to a very small triangle. The aft reef line on my main sail reef chafed through twice and had to be retied. When I leaned on the table in the main cabin it shifted noticeably to leeward. Investigation revealed that the self tapping screws that held the base to the hull liner had worked themselves out. Even with the wind and waves on the nose we kept on moving at 3.5 to 4 knots in the right direction.



The End: Buffalo Harbor Break Wall

Early on the morning of September 3rd, the apparent wind decreased to fewer than 20 knots and gradually shifted aft so we were on a broad reach. The waves decreased to less than 2 feet and we had a delightful sail under overcast sky into Buffalo. At 1217, GL3 passed through the break wall into Buffalo Harbor. It had taken 2 days and 14.5 hours to cross little Lake Erie. The entire trip had taken 8 days and 17.8 hours, just between my estimate of 8 to 10 days. The distance between the waypoints had been 799 nautical miles, but the log showed a distance traveled of 946 nautical miles.

Twenty years earlier my family moved from Southport, North Carolina to Detroit. For GL³, this involved sailing offshore to New York, then motoring up the Hudson River and through the Erie Canal. Along the Erie Canal all the local nautical experts told me how treacherous and rough Lake Erie could be. When we got into Lake Erie, there was not a trace of wind to be found and we motored almost all the way across a very flat lake. We nearly ran out of fuel but fortunately a light wind came up for the last few miles leaving about 15 minutes of fuel for final docking. It took 20 years before I saw a real demonstration of just how nasty little Lake Erie could really be!

Buffalo to Detroit

I had planned to spend 2 or 3 days in Buffalo for rest and relaxation. Again listening to the weather, it appeared that if I waited I would again have the wind on the nose. So with a rest of just over a day, we got under way on September 4 at 1732 from the Erie Yacht Basin at Buffalo. We motored most of the way home with relatively light wind on the nose. On September 6 at 0815, we tied up at Edison Boat Club. The entire round trip of over 1600 nautical miles had taken just under 18 days.

Things to Do and Things that Broke

During the trip I kept a running list of things to fix, change and buy. Here are a few of the highlights:

Things to buy:

1. New Edison Boat Club Burgee (the old one blew to shreds in the Lake Erie Gale)
2. Fly swatter (this device was clearly missed as it appeared twice in my list)

Things to fix or change:

1. My Simrad Autopilot (It failed the first day out due to water damage that clearly occurred last season. I carried 2 Simrad Autopilots fortunately.)
2. The forward reef line on the second reef did not pull the sail tight against the boom due to interference with a baton and the new low friction strong track.
3. Water faucet in the head sink needs a shutoff valve (Leaks into the sink when the boat is heeled and the water tank is higher than the sink.)
4. Install a latch on the galley silver drawer (Although an indentation in the sides holds it in place most of the time rough weather can open the drawer. Fortunately it does not dump the silver as it hits one of the companion way steps.)
5. Replace the screws that mount the legs of the main salon table to the hull liner. (The self tapping screws had all worked their way out.)
6. Replace burned out deck light
7. Fix leak on starboard shroud tang
8. Modify bow anchor locker so it is leak tight (With green water coming over the bow it tended to fill up adding a couple hundred pounds to the bow. I discovered this on the way to Chicago and used duct tape to seal it.)
9. Replace both aft reef lines (They were the oldest lines on the boat. The 2nd reef line chafed through twice in Lake Erie.)
10. Glue pencil holder at chart table back in place.
11. Replace burgee halyard (The halyard tore the burgee during the trip across Lake Erie)
12. Figure out why one of the spinnaker halyards had a spot chafed 30% of the way through near the top of the mast.
13. Put chart plotter mounting in cockpit.

Why not?

Why not a new challenge or race? This would take GLSS in a new and unique direction, My voyage during the summer of 2006 demonstrated that it is feasible. It would be the longest challenge in the Great Lakes from separate start and finish points. It would include passage through 4 lakes and 2 rivers. The rivers portion would offer a unique challenge. With the flexibility to start at any time one chose and attempt this challenges as many times as desired, one has the flexibility to complete this difficult challenge on one's own schedule. Just completing this challenge would be a major accomplishment that any sailor could be proud of. Many with the time and resources will take this on as the ultimate Great Lakes Challenge just because it is there. To those that say why undertake such a challenge or race. I can only reply: "Why not?"

Appendix B

Suggestions of Preparation for a Singlehanded Sail from Chicago to Buffalo

The following is a summary of some of the things one might consider in preparing to sail singlehanded from Chicago to Buffalo. The comments are based on my experience in making this trip during the summer of 2006. These comments focus on the fact that this would be the longest challenge in the Great Lakes and the unique challenges of the Detroit and St. Clair Rivers and Lake St. Clair.

- Try to get as much sleep as possible before entering the St. Clair River at Port Huron. You will not have a chance to get any sleep, (unless you anchor), until you get past Point Pelee in Lake Erie due to the constricted nature of the rivers and heavy traffic in the western end of Lake Erie.
- Familiarity and preparation is key to a successful passage through the St. Clair River, Lake St. Clair, and the Detroit River. The following are suggested actions to help with this:
 1. Purchase the latest version of Recreational Chart 14853: Detroit River Lake St. Clair St. Clair River. This is a chart book that includes detailed charts of these areas. Spend time to go through the course on each chart several times looking at the channel widths, navigation aids, and intended track. It may be helpful to mark up each chart showing which channel to take with a felt tipped pen. This will save trying to figure out which of the channels to take while you are trying to navigate the river. In some locations, there are choices that can be quite confusing. Also mark the next page to go to at the completions of each page as it will be necessary to skip pages in some cases. Look at the area available based on depth and other obstructions in case it is necessary to tack into the wind in each area. Keep this chart in the cockpit during this portion of the challenge and follow along turning the pages even if you use a chart plotter. It is easier to look ahead in the chart book and leave the chart plotter tracking your current location.
 2. Mount a chart plotter in your cockpit so it is in easy view of the helm location. Be sure you have the latest chart chip for your chart plotter. This is a necessity to keep from going aground at night or if you are tacking down the river. Input waypoints for the course down the river into the chart plotter. Although you will not follow these exactly due to shipping, tacking, etc. they will provide a guide and in particular will assist in taking the correct channels. This may involve entering quite a few way points due to all the turns in the river.
 3. If you are not familiar with the Detroit and St. Clair Rivers try to take a boat ride from one end to the other to gain familiarity. This need not be under sail. Follow along with the chart so you become familiar with the rivers, navigation marks, and extent of sailing room in each area. It may be possible to get some of those

who live in the area to set up such a tour over a weekend some time before the challenge.

4. Pick out potential anchorages along the course incase needed due to light wind, fatigue, or other difficulties.
 - Have an anchor on the bow and stern that is ready to let go if needed due to light winds and current push. There are several chocks that will allow you to hang or mount the anchor on the bow and stern pulpits in a manner that they can be easily deployed.
 - Install a pump for your sink to allow you to use lake water in your main galley sink. This is a common feature in ocean going boats and helps to extend the fresh water supply when sailing in the ocean. In the Great Lakes, one can use lake water (except in the rivers) for washing hands, dishes, and even for making coffee etc. if boiled. This will minimize the fresh water one must carry and minimize weight.
 - Plan out what you will be eating during the river portion of the trip and have it readily available. You will not have time to do much cooking except boiling water so it important to have things that can easily be eaten and already prepared in the cockpit.