

SOLO SWIMS OF ONTARIO

REGULATIONS

AND

INFORMATION

Revision 29a
14 January 2025

©1995-2025 Solo Swims of Ontario

1. TABLE OF CONTENTS

1. TABLE OF CONTENTS	1
2. INTRODUCTION.....	3
Solo Swims of Ontario.....	3
Marathon Swim	3
The Swim Master.....	3
3. SWIMMER INFORMATION	5
A. Swimmer's Package	5
B. Registration and Sanction	5
C. Deadlines.....	6
D. Trial Swim	6
E. Pre-Swim Planning	6
F. Insurance	9
G. Other Pertinent Information	9
H. Certificate of Completion.....	9
I. Contact for Additional Information.....	10
4. RELAY SWIMS.....	11
5. THE TRIAL SWIM.....	12
6. THE EQUIPMENT LIST	14
A. Swimmer Responsibility.....	14
B. Provided by SSO	15
C. Optional (provided by swimmer)	15
D. Suggested Crew	16
7. THE WEATHER	17
8. THE RULES.....	18
9. CODE OF BEHAVIOUR.....	20
A. Rules For Swim Crew	20
B. Rules for Lifeguard Boat Drivers	20
10. APPENDICES	21
Appendix 1 SSO Swimmer Registration Form.....	22
Appendix 2 SSO Relay Registration Form	24
Appendix 3 Registration, Insurance Part 1.....	26
Appendix 3 Registration, Insurance Part 2 – Adult version.....	27
Appendix 3 Registration, Insurance Part 2 – Minor Child version.....	29
Appendix 4 Medical Form	31
Appendix 5 Swimmer Fees	34
Appendix 6 Nutrition	36
Appendix 7 Hypothermia	37
Appendix 8 Early Season Advice	39
Appendix 9 Advice For The Last Month.....	43
Appendix 10 Lake Currents	45
Appendix 11 Lake Surface Temperatures	51
Appendix 12 Nautical Miles.....	52
Appendix 13 Banned Substances	53
Appendix 14 The SSO Certificate of Completion.....	54
Appendix 15 Standards for the Swim Master.....	55
Appendix 16 Lake Ontario Outcomes and Associated Trial-Swim Times.....	56
Appendix 17 Pre-Trial-Swim Training Log.....	62
Appendix 18 Pre-Swim Checklist for ALL Pacers	63

Appendix 19 Boat & Crew Confirmation Form – Part 1 64
Appendix 19 Boat & Crew Confirmation Form – Part 2 65
Appendix 20 Toronto Port Authority Application & Waivers..... 66
REVISION HISTORY..... 74

2. INTRODUCTION

Solo Swims of Ontario

The *Ontario Association of Solo Swims* was established upon the recommendation of the Ontario Ministry of Tourism and Recreation, Sports Fitness Branch, in 1975 as a result of a coroner's inquest into the drowning of a man attempting a swim across Lake Ontario without adequate safety precautions. The Association incorporated and changed its name to *Solo Swims of Ontario Inc. (SSO)* in 1990. SSO became registered as a Charity on 1st December 2004.

SSO's Mandate: To sanction all individual swims across Lake Ontario, and to ensure that such swims are conducted safely. SSO has extended this directive to include all of the Great Lakes, and any other body of water in Ontario where the swim meets the definition of a marathon swim.

SSO's Goals: To promote equity, diversity and inclusion in marathon swimming. This implies that SSO welcomes all swimmers regardless of disability, gender, ethnicity, sexual orientation, age, or any other way a swimmer may self-identity. SSO strives to welcome everyone and specifically does not discriminate on the basis of bias, such as perceived ability or stereotypes of athleticism. We are guided by openness but must also make decisions based on data/information about cumulative swim experience, adequacy of training (including endurance, speed and cold-water tolerance), and performance on a trial swim. This is intended to advance the goal of ensuring safety, rather than preventing participation in the sport of marathon swimming.

Marathon Swim

A sanctioned marathon swim is considered to be a contest of endurance and is 10 miles (16 kilometres) or more in distance, going across an open body of water from one shore to the opposite shore.

The Swim Master

To ensure the safety of all marathon swimming in Ontario, SSO assigns one of its representatives, the Swim Master, to each swimmer to confirm that basic safety requirements are met before the swim is attempted. These duties include the following:

1. Establishing the swimmer's fitness and capability level (refer to "The Trial Swim" in Section 5);
2. Ensuring the swimmer has the proper boating and swimming equipment (refer to "The Equipment List" in Section 6);
3. Checking the weather conditions (refer to "The Weather" in Section 7).

The Swim Master accompanies the swimmer to oversee the swim and to ensure the safety of all concerned, including swimmer, pacers, and crew. As the government representative, the Swim Master has the authority to cancel a swim at any time, either before or during the swim, if the Swim Master considers the swim to be unsafe.

The Swim Master will prepare a report for SSO and the swimmer, not more than four weeks after the swim, documenting the swim, including start time and place, finish time and place, and the official time taken for the swim.

Usually, although not always, the Swim Master is a successful marathon swimmer. As such, this person has direct experience in long-distance swimming and would be pleased to give suggestions or advice to a challenger.

The qualifications for ratification as a Swim Master are detailed in Appendix 15.

3. SWIMMER INFORMATION

A. Swimmer's Package

The *SSO Regulations and Information (SSORI)* documents constitute the Swimmer's Information Package. The SSORI contains information regarding a marathon swim, including a checklist of requirements, necessary items, and equipment, as well as the Medical and Registration Forms.

The SSORI may be downloaded for free in PDF format from the Solo Swims web site. The SSORI may also be obtained from the Secretary of SSO upon the payment of \$50 to cover the costs of postage and handling.

SSO reserves the right to interview an applicant before approving an Application or Registration Form – especially swimmers under the age of 18 years

SSO also reserves the right to refuse to accept an application and to deny sanctioning of a swim for any reason related to safety of swimmer or crew.

B. Registration and Sanction

To be registered, the swimmer must submit a Registration Form (Appendix 1), pay the Registration Fee (Appendix 5) and sign the releases and waivers in Appendix 3: Parts 1 and 2. The swimmer should include a preferred swim date and a back-up date. If the requested date is available, and the registration form is complete, SSO will confirm and assign a Swim Master when available after the month of September preceding the targeted swim date.

After Registration, to be sanctioned, the swimmer must submit a Medical Form (Appendix 4), submit a Pre-Trial-Swim Training Log (Appendix 17), complete the Trial Swim (See Section 5), and submit a Boat Confirmation Form (Appendix 19).

A Coach is mandatory and is essential for the safety and motivation of the swimmer. The Coach shall have the following knowledge of the swimmer and perform the duties outlined:

1. While a number of aspects are similar between sprint and marathon swimming, it is best if the Coach's knowledge and experience have incorporated marathon swimming.
2. A swimming background, with knowledge of both coaching and water safety
3. Have been on several training swims for marathon swims.
4. Have a personal knowledge of the swimmer and their swimming habits – *e.g.* knowledge of the swimmer's stroke-rate and recognition of signs of the swimmer's fatigue or onset of injury.
5. Knowledge of how to motivate the swimmer and what types of information (Time, distance, *etc.*) will motivate or depress the swimmer.
6. Supplying the swimmer with foods, liquids and any approved medications that the Coach has established are suitable for the swimmer for the anticipated duration of the swim.
7. Sit in the motorized inflatable boat next to the swimmer throughout the swim for the purposes of feeding, motivation, and troubleshooting any issues that may arise with the swimmer.
8. Be with the swimmer throughout the successful Trial Swim.

C. Deadlines

The assigning of the swim date, and the Swim Master is done on a first-come, first-served basis, and requires receipt of the Registration Form and Registration Fee. Therefore, the sooner the swimmer submits the Registration Form and the Registration Fee, the better the chance of getting the date requested. Once a swimmer is registered and a date is assigned, no other swimmer can have this date, unless another Swim Master is available.

The Boat Confirmation Form should be submitted to SSO four weeks in advance but, in any event, at least two weeks before the swim; otherwise, the sanction of the swim may be cancelled. The medical examination should be completed, and the Medical Form submitted at least a week *before* the Trial Swim is attempted.

The Authorization and Waiver of Claims (Appendix 20) for the Toronto Port Authority (TPA) provides permission to swim in the Toronto Harbour area. The swimmer or swimmer's representative must FAX those completed forms to the TPA about 1-2 months in advance of the requested Swim Date.

The following deadlines should be considered minimum requirements in the process of receiving final approval for a swim:

Minimum Deadlines	
Weeks Before Swim	Requirement
8	Registration Form, Insurance Forms and Fee. Latest date for submission is April 30
4-8	Satisfactory submission of TPA Forms (Appendix 20). This is a TPA requirement.
6	Medical Form. Dated Jan 1 or later in year of swim
5	Pre-Trial-Swim Training Log (Appendix 17) submitted one week prior to the Trial Swim.
4	Trial Swim
2.5	Waiver of Claims
2	Boat Confirmation Form

D. Trial Swim

Prior to challenging a lake, the swimmer is required to complete a prescribed Trial Swim to confirm the swimmer's ability and level of fitness. Generally, the Swim Master monitors this Trial Swim and ensures the necessary safety with respect to weather and accompanying boats and crew. The swim must be performed outdoors in open water, without the support of Pacers, and with the swimmer's Coach in attendance. Arrangements should be made for a convenient time and place. Refer to Section 5, "The Trial Swim", for further information.

E. Pre-Swim Planning

It is strongly recommended that swimmers have a "back-up" date planned should the swim not proceed on the assigned date. In order to provide first-choice dates for other swimmers, back-up

dates cannot be reserved; however, every effort will be made to ensure the swimmer has an opportunity to make a crossing attempt.

At the Pre-Swim Meeting, the Swim Master will meet with the boat owners, the coach/manager, the swimmer, and crew to review safety procedures (such as weather conditions, course, and emergency evacuation), to assist in organization, to plan strategy, and to set up communications. This meeting ideally should take place well in advance of the swim, but this is not always feasible. At the very least, the Swim Master will hold the meeting at the departure point. No swim will be allowed to proceed until this briefing meeting has taken place.

A swimmer may request a specific SSO Swim Master for the swim, provided the requested Swim Master is willing and available.

The swimmer shall make the following arrangements for the Swim Master to attend the swim, with costs as detailed in Appendix 5 “Swimmer Fees”:

1. Provide, or pay for, the transportation of the Swim Master to the starting point of the swim, plus any entrance fees;
2. If accommodation is required, pay for the Swim Master's hotel accommodation, or provide suitable accommodation acceptable to the Swim Master;
3. Provide meals, as necessary, before the swim;
4. Provide meals during the swim itself; and
5. Provide, or pay for, the transportation home for the Swim Master.

Toronto Port Authority (TPA)

For a swim across Lake Ontario, The Toronto Port Authority requires notification and a signed Waiver of Claims, to be received 4-8 weeks before the earliest expected date of the swim. The notification is mandatory for any swim that takes place within the Toronto Port Authority's jurisdiction and a separate notification is required if the swimmer finishes the swim at the Leslie Street Spit (Vicki Keith Point). The forms are found in Appendix 20, but the swimmer should ensure that the forms are still up-to-date at the time of application. To reach the TPA, phone 416-462-3937 or FAX 416-462-1612, e-mail HOel@portstoronto.com. Note that the swimmer does not need to provide the TPA with a copy of SSO's Liability Insurance; this information is provided to the TPA by the SSO Secretary, along with a list of the SSO-approved swimmers for the year.

It is advisable not to plan swims to arrive at MBP or in the Greater Toronto Area during special events or vacation days, especially Caribana event on the long-weekend at the beginning of August, and the air-show that is held during the Labour Day weekend

Marilyn Bell Park (MBP)

To avoid subsequent disappointment when selecting a date for a swim that is proposed to land in Toronto, the TPA and Toronto Parks authorities should both be contacted first to ensure that there are no conflicting events that are already approved for the area(s) on the chosen date(s).

Swims that plan to land within the area controlled by the Toronto Port Authority, especially at Marilyn Bell Park, need to ensure that there are no Toronto-Parks-approved or Toronto-Harbour-Authority-approved events that would prevent the swimmer or their crew from landing in Toronto (specifically MBP) or from having suitable land-access to the area. To check on such registered events and to make arrangements (if it is permitted by the authorities) for the swimmer's landing, the swimmer or their Manager must submit a relevant form and contact the relevant authorities at:

<http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=f5841d94f4301410VgnVCM10000071d60f89RCRD&vgnextchannel=bc2adada600f0410VgnVCM10000071d60f89RCRD>

Permit Office
Special Events
416-338-2614
416-392-1551 FAX

With prior notification, inflatable boats can be removed from the water at Ontario Place Marina.

Landing at the National Yacht Club offers a swim of a similar distance as going to MBP, and a shorter swim is possible with a landing at Leslie Street Spit; however, these optional landing points still require prior approval from the TPA.

Metropolitan Police, Marine Division

The Metropolitan Police, Marine Division, also should be contacted at (phone) 416-808-5800. If notified, the Police will often send a boat, if available, for the last few miles of the swim to assist the entourage navigate through the near-shore traffic.

Niagara-on-the-Lake Sailing Club (NOLSC)

As of 2019, swimmers no longer have permission to use the docking and parking facilities of the Niagara-on-the-Lake Sailing Club.

Radio Communications

Walkie-talkies are invaluable for communication between the Zodiacs and the accompanying boats. If walkie-talkie units are required, swimmers will need to provide their own units.

VHF radio communications are valuable, but the user must have a licence for their operation.

Sponsors

The swimmer may wish to obtain a sponsor for the swim. The sponsor, which may assist the swimmer with some or all of the costs associated with the swim, may be either a corporation or a charity. If a charity, the swimmer may be involved in fund-raising.

Public Relations

The following media contacts may be of use to the swimmer or their manager in providing information to the news media. These contact details, however, change with time, so may not all be up-to-date at the time of use:

Toronto Star	416-869-4301	city@thestar.ca
Toronto Sun	416-947-2211	citydesk@tor.sunpub.com
Globe & Mail	416-585-5151	nrasbach@globe&mail.com
Canadian Press	416-507-2150	jmcarten@cp.org
Spectator	905-526-3420	rhughes@thespec.com
St Catharine's Standard	905-684-7251	pconradi@stcatharinesstandard.ca
CFRB	416-924-6717	news@cfrb.com
CHUM	416-925-6666	news@chumamfm.com
CHML	905-521-2700	news2@900chml.com
CBC Radio North	807-625-5013	gary_rinne@cbc.ca
CBC RADIO	416-205-6200	stuart_einer@cbc.ca
CBC-TV	866-306-4636	Fax 416-205-7166
CTV Toronto	416-332-5000	Fax 416-299-2273 news@ctv.ca
CKCO	519-578-1313	Fax 519-743-8857
GLOBAL-TV	416-446-5311	globalnews.tor@globaltv.com
CP 24	416-591-5757	news@pulse24.com
CH-TV	905-522-1101 x2251	newstips@chtv.ca

F. Insurance

SSO carries insurance coverage for the swimmer and SSO-appointed officials during these swims, provided the individuals are citizens of Canada or legal Landed Immigrants. Through the Release Clause on the Application Form (Appendix 1), and the Insurance forms (Appendix 3), SSO cannot be held responsible for injury incurred prior to, during, or after a sanctioned marathon swim, and the swimmer acknowledges this situation by signing the related Release Clause.

For swimmers who are not citizens of Canada or legal Landed Immigrants, they must provide evidence of adequate personal insurance at the time of registration for the swim. The swimmer's certificate of insurance must show Solo Swims of Ontario Inc. as an additional insured. For those who do not have suitable existing insurance coverage, they may contact SSO's insurers through the following contact to obtain suitable coverage:

Marie Farley, a.v.c./RLU
BFL Canada services conseils inc.
2200-2201 av. McGill College
Montréal (Québec), H3A 1G1
514-315-3338 mfarley@BFLCANADA.ca

G. Other Pertinent Information

The consuming of alcoholic beverages, sedatives or contraband drugs, of any kind, by anyone, is strictly prohibited during the swim and could lead to the discontinuance of the swim.

It is advisable for the swimmer to proceed to a hospital for a check-up after the swim has been completed. An ambulance should be secured well in advance. In Toronto, phone 416-638-7301.

The Emergency Department of a hospital should be notified in advance that a swimmer will be arriving. The Toronto Western Hospital Emergency Department phone number is 416-368-2581. Contact the Head Nurse.

It is advisable to obtain permission in advance for the use of facilities of the yacht clubs at the start and finish of the swim.

A swimmer's contact on land can telephone to an accompanying boat by dialling zero and then asking for the marine operator. State the name of the boat, the person to speak to, and the approximate location of the boat on the lake. A calling card is required.

There is a "dead zone" for cell phone reception of about 20 km in the middle of Lake Ontario.

The swimmer should bear in mind that the boat owners and the swimmer's crew are, in most cases, volunteers, and some form of recognition or formal thank-you is appreciated.

H. Certificate of Completion

SSO provides a certificate to all swimmers who have abided by the rules (refer to Section 8 "The Rules") and completed a successful swim. Pertinent details are entered into the Solo Swims of Ontario Record Book. The swimmer will receive the certificate within three months of ratification of the swim (See Appendix 14). For successful swims from NOTL to Toronto, or Toronto to Port Dalhousie, the swimmers are also entitled to have their name, date, and swim-time emblazoned in bronze on the SSO Plaque located at Niagara-on-the-Lake.

I. Contact for Additional Information

Swimmer registrations and medical forms, or requests for additional information, should be made to Solo Swims of Ontario at the following address:

Solo Swims of Ontario Inc.
c/o Dr M. Korzekwa, MD
980 Queenston Road, Suite 302
Stoney Creek, Ontario
Canada, L8G 1B9

Email: momswims@gmail.com

4. RELAY SWIMS

1. Relays must follow all the rules and procedures that apply to solo swims. This includes the minimum age being 14 years on the date of the swim, no wetsuits or assistive devices allowed, and full medical exams for each participant. The full boat complement is also required, especially 2 inflatables.
2. In addition, the Trial Swim for ALL Relay swimmers is defined as 1/3 of the distance each swimmer is expected to swim, rounded up to the next whole kilometer. It is to be completed in the same or similar body of water as the proposed relay. All swimmers should complete the trial swim together under the supervision of the Swim Master.

Example: Six swimmers planning a 52 km swim will each expect to swim a total of (52/6) km (i.e. 8.67 km). One-third of this distance is 2.89 km. Rounded up, this sets the Trial Swim at 3 km for each of the 6 swimmers in the proposed 52 km relay.

3. Types of Relays:

- 3.a. **STANDARD RELAY:** Each standard team shall consist of 6 swimmers each swimming for 1 hour. The names and the order of swimming of the 6 persons shall be given to the Swim Master before the actual commencement of the swim. After the first round of swimmers have completed their swims, there shall be NO changes in order or substitutions whatsoever. If a swimmer is unable to swim, the relay shall be disqualified as a standard relay and may complete the relay as a Non-Standard swim.

Each swimmer shall swim for one hour each time he/she enters the water.

- 3.b. **NON-STANDARD RELAY:** A non-standard relay will be run under the same rules as a standard relay, except for the allowance of the number of persons in the team and the swimming time-interval. Teams can be 2, 3, 4, 5, 7 or 8 people. Teams will also be allowed the option of choosing how long each swimmer shall swim (minimum 30 minutes). This option must be declared before the start of the crossing and maintained throughout the crossing.

4. In a Relay, the change-over/takeover from one swimmer to the next should take place at the pre-determined time-interval, with the new swimmer entering the water on a signal given by the coach. During the take-over, the new swimmer must either swim past or touch the preceding swimmer. The previous swimmer must then exit the water as quickly as possible. The change-over should take no more than 5 minutes. The Swim Master will be documenting these change-overs.
5. Failure of the team members to rotate in the same predetermined order, or to swim for the pre-determined time-interval will not necessarily involve termination of the relay; however, the relay will not be officially ratified.
6. Pace-making or the use of a support swimmer is NOT allowed for relays.
7. SSO strongly recommends the presence of a doctor, nurse or paramedic to monitor each swimmer for hypothermia as the risk of after-drop is higher in repeated swims.
8. Registration fee for relays across Lake Ontario is \$1,000 and for relays under distances of 27 kilometres is \$750.

5. THE TRIAL SWIM

Before SSO will sanction a proposed swim, a challenger must complete an outdoor, open water, continuous swim of not less than one-third of the intended distance, with a maximum of ten miles (sixteen kilometres). The purpose of the Trial Swim is to show that the swimmer has a reasonable chance of swimming the length of the marathon swim, can swim for an extended time in waves and cold water, and is fit and fast enough to overcome adverse currents. To demonstrate the above abilities, SSO requires swimmers new to marathon swimming to swim their trial swim in the same, or a similar, body of water, to that which is being challenged. This swim cannot be in a swimming pool. The swimmer's Coach shall be in attendance throughout the Trial Swim.

Swimmers who have recently swum a Great Lake, or similar ratified cold-water swim, only need to prove that they are currently fit and fast enough. This can be accomplished by a trial swim in a smaller body of water than they are attempting.

For swimmers who are resident outside of Ontario, or in other circumstances where it is logistically difficult for SSO to attend the Trial Swim, SSO may accept evidence of a swim, either authenticated by a swimming governing body or as a completed "mail in" Trial Swim Form signed by at least two witnesses, as a proxy for the Trial Swim. This swim must be done in a body of water similar to the one being attempted, especially with regards to waves, colder temperatures, and lack of assistance by currents. Please contact SSO for the "Mail in" Trial Swim Form. All Trial Swims are subject to the Board's approval.

If Pacers are to be used on the main swim, then it is important for the swimmer and pacers to practice swimming together; however, PACERS are NOT ALLOWED during the Trial swim.

Pre-Trial-Swim Preparation: During the training season, in order to prepare for the Trial Swim for a Lake Ontario swim, SSO recommends that the swimmer complete the following training swims:

- A 25-30 km continuous swim, which may be done in a pool, and
- Five open-water swims in a similar body of water to the lake being attempted. Each swim should be of about 2 hours duration and include a variety of weather conditions including waves, cold water and night-time.
- Training for a swim on a lake other than Lake Ontario may involve adjustment of the times and distances and can be established in consultation with the Swim Master.

The swimmer MUST submit written-and-verified details of adequate preparation and have them approved by the Swim Master PRIOR to the date of the Trial Swim. It is recommended that the swimmer utilize the form in Appendix 17 (Pre-Trial-Swim Training Log) for their coach or trainer to document these specific swims.

Once SSO receives the aspirant's Registration Form, and the Registration Fee, either a representative of SSO or the actual Swim Master for the official swim will be assigned to conduct the Trial Swim. This person will contact the swimmer to set a date, preferably within four weeks of the proposed swim, and agree on a location. The swimmer swims either parallel to the shore while the Swim Master and Coach on shore observe and count the laps, or across the body of water, provided boats and safety equipment are used. The length of the course used for the Trial Swim must be measured by GPS.

Note: A GPS will provide an accuracy of ± 10 to ± 20 metres when measuring between two points. This feature needs to be taken into account when establishing the course for the Trial Swim.

A successful Trial Swim for any course is judged by the completion of the prescribed distance without undue fatigue, while demonstrating the use of an adequate feeding plan.

Lake Ontario:

- A comprehensive data-analysis (Appendix 16) of trial-swim times and Lake Ontario swim-outcomes (on the Niagara – Toronto route) since 1983 has demonstrated that swimmers require sufficient endurance and speed to be successful in crossing the Humber River's outflow and other circulation currents in the second half of their swim. Without sufficient endurance and speed, these currents add significantly to the length of the swim, leading to a level of exhaustion that has caused serious and potentially life-threatening medical complications which warranted 2- to 3-day hospital admissions.
- The 16 kilometre trial swim has proven to be a valid measure of a swimmer's endurance and speed, and a maximum Lake Ontario trial swim time-limit of 6 hours and 45 minutes would have avoided serious medical complications.
- Trial swims between 6:15 and 6:45 resulted in very long (> 26 hours) Lake Ontario swim times and a reduced probability of an extended emergency room visit.
- Consequently, the following guidelines are established to assess the results of the 16 km Trial Swim for proposed Lake Ontario crossings:
 - **< 6hours 15 minutes:** The Trial Swim is considered a PASS, if it is completed in under 6 hours and 15 minutes "without undue fatigue".
 - **6:15-6:45:** If the Board passes a trial swim between 6 hours 15 minutes and 6 hours 45 minutes, the subsequent Lake Ontario swim will be considered a "Specialized Support Swim" and the swimmer will be required to provide additional medical support, a second Swim Master, as well as other possible safety measures as determined by the Board.
 - **>6:45:** A trial swim for Lake Ontario that is over 6 hours and 45 minutes is, without exception, a **FAILED** trail swim.

The interpretation of these requirements is the responsibility of the Swim Master who makes a recommendation to the Board of Directors of SSO on the acceptability of the Trial Swim. ***Judgement of the acceptability of the Trial Swim is the responsibility of the SSO Board.***

A swimmer must complete the Trial Swim in order to have SSO sanction the swim listed on the swimmer's Registration Form.

A swimmer who does not complete the Trial Swim successfully can reapply for another Trial Swim.

During the Trial Swim, the swimmer should try to imitate as much as possible the conditions that will be experienced on the actual swim. Trying different types of food and practicing feeding is highly recommended (See Appendix 6). Immediately after the swim, a core temperature (rectal) reading can be taken to provide information about resistance to cold.

Although night swimming is a valuable experience for the swimmer, this is not recommended for the Trial Swim, except under exceptional circumstances, and unless it is conducted by and with the consent of the actual Swim Master, who shall require all necessary safety procedures to be followed.

If a swimmer registers to complete one marathon swim with SSO and intends to use a portion of that swim as their Trial Swim for another marathon swim with SSO, this request must be established before the first marathon swim takes place, so that it can be properly monitored and documented by the Swim Master. Both marathon swims will be charged at the full rate for Registration.

6. THE EQUIPMENT LIST

A. Swimmer Responsibility

A1a. Large Boats:

Two boats, each at least 30 feet for a swim on a Great Lake. Although not mandatory, it is recommended that the "lead" boat be a sailboat and the "tail" boat be motor powered. In case of emergency, for evacuation purposes, one of the boats should be capable of a speed of at least 15 knots.

The navigational system on at least one of the boats should be GPS. There should be compass back-up and a chart of the lake.

All accompanying boats should have lightning rods and/or be properly grounded. A radar reflector is highly recommended.

There should be VHF ship-to-shore radio on at least one boat.

There should be cooking facilities on at least one boat to heat food for the swimmer and crew.

The boats should permit easy access for transferring crew to and from the lifeguard boats.

A1b. Lifeguard Boats:

The swimmer has to provide two inflatable boats, at least 14 feet (4 m) in length, with 7.5 to 15 HP motors, equipped with running lights (bow and stern), sufficient gas, life jackets or personal floatation devices (PFDs), throw ropes, a tested towing system, and safety equipment as required by the coast guard.

A1c. Kayaks:

Only ONE kayak is allowed on a swim. Someone in the lifeguard boat has to be assigned to lifeguard the kayak. Vigilance in watching the kayak is especially required at night and in waves. SSO strongly recommends the use of the sit-on-top (unsinkable) model of kayak. All paddlers using the spray-skirt type kayak should be proficient in the Eskimo roll. There should be room on one of the Large Boats in the flotilla to accommodate the kayak in the event of unfavourable conditions or evacuation.

A2. Life Jackets and Personal Floatation Devices:

The swimmer should ensure with the owners of the accompanying boats that there are sufficient life jackets or personal floatation devices (PFDs) for every crew member on all boats, plus one for the swimmer.

A3. Walkie-Talkies:

There should be a fully-charged walkie-talkie for each boat, including both lifeguard boats. The walkie-talkies and their recharger should be pre-tested.

A cellular phone is recommended, for emergency use and for media contact.

A4. Food:

It is the swimmer's responsibility to provide food for everyone, including swimmer, coach, pacers, crew, all personnel on the accompanying boats, and the Swim Master. Be environmentally

conscious; no Styrofoam cups. For the swimmer, use recyclable or paper cups or, better still, retrievable plastic cups or plastic feeding bottles attached to the lifeguard boat on a string.

A5. Other:

- One large flashlight on each boat for use by swimmer's crew.
- Blankets or sleeping bag for swimmer at conclusion of the swim or if pulled out because of cold.

B. Provided by SSO

- Swim Master.
- Light-emitting-diode (LED) light for attachment to the swimmer's goggle strap.
- Chemical glow lights for the swimmer and the lifeguard boats during night swimming.
- First-Aid kit.
- Low-temperature thermometer.
- Aluminum thermal blanket.

C. Optional (provided by swimmer)

- Thick-soled footwear or a suitable long mat to prevent foot injuries when entering the water.
- Device(s) to facilitate feeding of the swimmer – *e.g.* feeding pole (to offer a cup, bottle, *etc.*), bottle on a rope, *etc.*
- Spotlight to train on swimmer in darkness.
- Spare GPS system for potential use in the inflatable support boat.
- A third large (30 feet / 9 m) boat; a high-speed power boat, with ship-to-shore radio and GPS.
- Sea anchors.
- Light to illuminate stern of lead boat.
- Bullhorn/loudspeaker for the rear boat and lifeguard boat #1.
- Net on a long pole to retrieve cups, goggles, *etc.*
- Earplugs: Custom-made (available from hearing specialists), or silicone, or wax (both of which can be purchased at a drug store), or other form suitable to the swimmer's needs. If earplugs are used by the swimmer, it is advisable to have more than one pair available.
- Tinted, ultra-violet swim goggles during the day, clear swim goggles at night, and thick bathing caps.
- Vaseline or anhydrous lanolin, or other suitable non-allergenic grease that does not clog the pores of the skin.
- Pacers (***Not allowed to swim at night*** for safety reasons).
- Wetsuits, flippers, pull-buoys, kickboards, paddle boards or closed sea kayaks for pacers only.
- Whistle and a small blackboard for messages.
- Anti-sea-sickness Sea Bands, or skin patches for the crew.
- Four hot packs to warm the swimmer.
- Large, pre-filled thermos flasks for initial swimmer feedings to minimize contact with the accompanying boats in the beginning hours of the swim, which is usually in darkness.

D. Suggested Crew

- Coach and/or Manager.
 - It is advisable to have a coach or manager who is experienced in long-distance swimming. Ideally, this person will have a swimming and/or coaching background, knowledge of water safety, and experience in open water swimming. He/she should also have a list of personal details about the swimmer for the purpose of testing the swimmer's mental state during the swim.
- 3 or 4 pacers with previous open-water and cold-water experience. These individuals may use Swimming Aids such as a wet-suit, flippers, *etc.* Pacers are NOT permitted during the Trial Swim. Refer to Section "8. The Rules" concerning their use. Prior to the swim, details of the experience of ALL proposed pacers shall be documented (Appendix 18) for the Swim Master's approval.
- 3 or 4 lifeguards.
- 3 or 4 lifeguard-boat drivers who have previous positive experience with accompanying a swimmer and, preferably, have accompanied the swimmer during the Trial Swim.
- Doctor, nurse or paramedic.
- Lifeguard with National Lifeguard Service certification.
 - It is strongly recommended that one or more of the swimmer's crew have a lifeguard certificate and is knowledgeable in first aid, CPR, and hypothermia.

Additional Notes on Crew:

- A marathon swim is an arduous undertaking, not only for the swimmer but also for the crew.
 - In the past a swim has been cancelled, just a few days before the scheduled swim, due to a heart attack suffered by the captain of the lead boat.
 - In a successful English Channel swim, the coach who had also swum the Channel in the past, died of a heart attack as the swimmer completed the swim.
- Swims are better organized and run more smoothly if every person on the swim is given a job identified in advance.
- Space on the lifeguard boats is limited and must accommodate support crew, safety equipment, carry-on bags, and food. No more than three people are allowed on a lifeguard boat at any one time. Remember, in an emergency, you may also have to accommodate an exhausted swimmer in the boat.
- To keep the number of crew manageable, crew can double-up on duties such as pacing, lifeguarding, and lifeguard-boat driving.
- Do not choose crew who are prone to seasickness. Nevertheless, ensure there are sufficient remedies to combat the possibility of seasickness occurring.
- Since September 15, 2009, all boat drivers (including boats less than 4 metres in length, and jet skis) are required to carry a ***Pleasure Craft Operator Card***. Obtaining a ***Pleasure Craft Operator Card*** involves passing a written boating test – details of which may be obtained from any Power Squadron or from <http://www.boaterexam.com>

7. THE WEATHER

Provided the swimmer has trained properly, both physically and mentally, the Trial Swim has been completed satisfactorily, the equipment and crew are well organized, and SSO has sanctioned the swim, then the remaining factor to be considered is the weather. A swim across a Great Lake is very much dependent upon the weather. For this reason, a crossing of Lake Ontario is reputed to be one of the toughest swimming challenges in the world.

12-24 hours prior to the anticipated start of the swim, SSO requires the swimmer's coach and/or manager, in consultation with the swimmer, obtain the Swim Master's confirmation that the forecasted weather, during the anticipated swim-window, meets the minimum acceptable standards.

"Minimum Acceptable Standards" means the following:

1. No lightning or thunderstorms are predicted for the lake during the 24 hours after the anticipated start of the swim, with the recommendation that any thunderstorm predictions are located more than 50 km beyond the shores of the lake;
2. The waves are not more than one metre trough-to-crest;
3. The wind is not more than 10 knots (19 km/hr); and
4. The water temperature is at least 10°C (50°F).

These minimum acceptable standards have been established for safety reasons and that weather meeting these standards can be far from ideal for a swimmer. To ensure the best chance for success, the water temperature (See Appendix 11) should be at least 18°C (65°F), and there should be minimal winds. In addition, strong winds over the previous 24 hours can result in pronounced surface currents on the lake. Refer to Appendix 10, "Lake Currents".

After the start time is confirmed, the coach and swimmer ideally should not change it unless there is a medical problem, or other extenuating circumstance.

In the intervening period prior to the start of the swim, the Swim Master will notify the coach/swimmer if the weather becomes unacceptable, and a postponement is necessary. SSO understands considerable organization and arrangement of people and time is involved in a marathon swim, and that a postponement can cause inconvenience and hardship; nevertheless, the safety of the swimmer is paramount.

One-to-two hours before the swim is to take place, at the point of departure, the Swim Master will confirm that the equipment is in order and that the weather forecast remains acceptable. At this time, the Swim Master will conduct a meeting with all concerned to review safety procedures and will recommend to the coach/manager final job roles, if necessary.

For safety reasons only, the Swim Master has final authority on assuring that the swim meets required safety standards and, therefore, the Swim Master reserves the right to withdraw SSO's sanction for the swim.

For 3-5 days after a heavy downpour or when the lake has been at 75°F (23°C) for a week or more, the bacteria count increases rapidly, especially near Toronto. Please take extra precautions against nausea in these circumstances – *e.g.* very light pre-swim meal, stay well hydrated, use anti-nausea wristband, and don't wash goggles in the lake water.

8. THE RULES

1. **SWIMMING ATTIRE:** No swimmer shall use or wear any device or swim-suit that may aid his/her speed, buoyancy or endurance during an SSO-recorded swim. Included in, but not limited by, this list of aids are fins, flippers, webbed gloves, pull-buoys, kick-boards, feedback devices for timing, heart-rate or blood-pressure.

Any kind of material (*e.g.* tape) on the body, that provides muscular or structural-bracing, is not permitted unless approved BEFORE the date of the swim by the Swim Master upon consultation with the SSO Risk Management and/or Medical Officers.

The swimmer is permitted to wear a bathing suit, up to two bathing caps (Not neoprene or cellular), swimming goggles, and to apply some form of grease to the body before a swim.

Heavy industrial or axle grease is not recommended as it clogs the pores and does not allow the body to breathe. Vaseline or anhydrous lanolin is recommended. Grease is not used to keep the cold out, but to keep the heat in. It also prevents chafing, particularly on the shoulders and inner thighs. (See "Hypothermia", Appendix 7.)

Each swimmer shall wear two SSO-supplied lights for identification in the dark. One shall be attached to the goggle strap and the other shall be attached to the swim-suit.
2. No swimmer shall wear a swimming suit that is made of neoprene, rubber, or any other non-porous material designed in any way to contain body heat and/or aid buoyancy and may be subjected to a buoyancy test. The swimsuit shall end at the neck, top of the shoulders, and the crotch – *i.e.* no sleeves or shorts – no “jammers”. The bathing cap shall be normally designed swimming headgear.
3. **START:** The swimmer must enter the water from the shore at the departure point, swim across the body of water until there is no further water beyond, and touch the mainland of the opposite shore.
4. Aspirants are required to confirm with the Swim Master the departure time of the swim at least 12 hours in advance.
5. **MULTIPLE CROSSING:** For a multiple crossing, the swimmer must land as in Rule 3 above. The swimmer must then immediately return to the water and is permitted to stand or sit for up to 10 minutes. During this time, the swimmer must not be touched by any person, but may be handed food, drink, grease, medicants, or swimming apparel to be administered by the swimmer. At the end of the allotted rest period, or sooner if the swimmer wishes to continue, the swimmer, in agreement with the Swim Master, will make the most direct and reasonable way to water deep enough to swim, and recommence swimming. The time spent in shallow water during the rest period shall be included in the total time of the swim.
6. **PHYSICAL CONTACT:** During the swim, no physical contact with the swimmer is allowed by any person. Unintentional touching of the swimmer during feeding and re-greasing of the swimmer while in the water are both allowed, but the swimmer cannot be supported or aided in any way.
7. During the swim, the swimmer is not allowed to touch or hang on to any part of any of the boats, although unintentional touching or pushing away during feeding or in rough water will not result in disqualification.
8. **DRAFTING:** No drafting (following closer than 2 metres) behind another swimmer or boat will be permitted. One warning will be given before disqualification, unless the violation is blatant and/or deliberate.
9. **PACING:** No Pacers are allowed during the Trial Swim. One pacer at a time will be permitted with the swimmer, during the main swim. No pacers allowed ***before Five Hours have elapsed.*** No pacing at night. Pacers must be 14 years of age or older. The Swim Master shall have the final say regarding any accompanying swimmers – See Appendix 19.

10. **TIMING:** The Swim Master's ruling will be final, subject to official ratification by Solo Swims of Ontario Inc. The Swim Master shall be in sole charge of timing of the swim and shall be responsible for compliance and interpretation of the rules.

The timing of the swim shall start from the moment the swimmer enters the water until the swimmer touches the opposite shore.

The timing shall be recorded to the nearest second.

A record-breaking swim shall be required to improve upon the previous best time by 60 seconds.

To ensure the provision of proper timing that will enable ratification of a time as a new record, notification of a potential record-breaking swim **MUST** be made **BEFORE** the start of the swim. For the monitoring of such a potential record time, times must be taken by three timekeepers appointed or approved by the Swim Master.

Prior to the start of the swim, all watches shall be certified as accurate to the satisfaction of the Swim Master.

The Swim Master shall instruct the selected Timekeepers as to the Start and Stop conditions for the timing:

- Timekeepers shall start their watch at the starting signal and shall stop it when the swimmer has completed the course.
- If requested by the Swim Master, each Timekeeper must present their watch, with its recorded time, for inspection by the Swim Master.
- The Swim Master has the right to disallow any timing device (s)he believes is out of calibration.

The final Official time shall be determined as follows:

- If two of the three watches record the same time (to the nearest second), and the third disagrees, then the two identical times shall be the official time.
- If all three watches disagree, the watch recording the intermediate time shall be the official time.
- If all three watches disagree, and no individual watch is widely different from the other two, then the watch recording the intermediate time shall be the official time.
- With only two of the three watches working, the average of the two (rounded-up, if necessary, to a full second) shall be the official time.
- In the case of any problem with the interpretation of the recorded times, the Swim Master shall record all of the details and report them to the SSO Board for their guidance.

NOTE: A GPS device can provide precise date- and time-stamping for the start and finish.

11. **DRUGS:** Any swimmer found using any substance banned by the Sports Medicine Council of Canada will be immediately disqualified (See Appendix 13).
12. Alcohol, sedatives, and contraband drugs are **NOT** permitted to be consumed by anyone on any of the boats at any time during the swim.
13. **AGE:** The swimmer shall be at least 14 years old at the start of the swim. This requirement also applies to the Trial Swim.

9. CODE OF BEHAVIOUR

A. Rules For Swim Crew

1. Wearing of lifejackets is recommended, and is mandatory for non-swimmers, in rough water or upon instruction by the Swim Master.
2. Absolutely NO alcohol, sedatives, or contraband drugs before or during the swim.
3. Absolutely NO night swimming.
4. Do not stand in a moving lifeguard boat.
5. Do not enter the water without the approval of the Swim Master or coach AND the permission of the boat driver.
6. Be very careful when transferring from one boat to another as this is when most injuries occur.
7. Please honour the wishes of the boat owners, and respect their boats and facilities.
8. Do not use the ship radio without permission.
9. No swearing on the walkie-talkies, and keep walkie-talkie use to a minimum as the batteries quickly run down.
10. For the same reason, be diligent with flashlight use.
11. If sleepy, ask to be replaced.
12. Swim crew members must bring their own necessities. Recommended accessory items include rain suit, sweater, towel, sunglasses, hat, sunscreen, gloves, wool socks, bathing suit, and sea-sickness pills.
13. Respect the decisions of the Swim Master has final authority regarding safety issues.
14. Be respectful of each boat owner's property and equipment; use only with permission.

B. Rules for Lifeguard Boat Drivers

1. Always stay at the side of the swimmer. Never drive in front of, or be too close behind, the swimmer, or go where gas fumes will blow on the swimmer.
2. There must be at least one lifeguard-boat beside the swimmer at all times.
3. Motors must be in neutral during feeding and transferring of occupants or equipment from boat-to-boat or water-to-boat.
4. Be careful with the fragile lighting system.
5. You should never be alone on the lake. During an evacuation, or at the end of a swim, always travel with a big boat or other lifeguard boat.
6. When rough water requires repositioning the boat next to a swimmer, one boat member must act as a "spotter" and point at the location of the swimmer throughout the manoeuvre.
7. To prevent injury to other crew members when starting or re-starting the motor, it is the responsibility of the person starting the engine to ensure that the other crew members are well clear of the starting area.

10. APPENDICES



Appendix 1



SSO Swimmer Registration Form

NAME OF SWIMMER: _____.

ADDRESS: _____
_____.

PHONE: (HOME) _____ (BUSINESS) _____.

E-MAIL: (HOME) _____ (BUSINESS) _____.

GENDER: _____ BIRTH DATE: _____ AGE (Minimum 14): _____.

NATIONALITY: _____ OCCUPATION: _____.

HEIGHT: _____ WEIGHT: _____.

ALLERGIES: _____.

NAME OF COACH (Mandatory - See Section 3B): _____.

ADDRESS: _____.

PHONE: (HOME) _____ (BUSINESS) _____.

E-MAIL: (HOME) _____ (BUSINESS) _____.

RELEASE CLAUSE:

In consideration of your acceptance of this Registration Form, I, _____, intending to be legally bound, hereby for myself, my heirs and assigns, waive any and all claims for damages I might have against Solo Swims of Ontario Inc., its members, or any persons working for or associated with Solo Swims of Ontario who are involved with my swim for any and all loss, damage, or injury sustained by me before, during, or after the swim. I have read the Regulations and Information, including the Rules, and will abide by the same if my swim is sanctioned.

SIGNATURE OF SWIMMER: _____ Date: _____.

SIGNATURE OF COACH: _____ Date: _____.

IF SWIMMER IS UNDER 18 YEARS OLD, SIGNATURE OF PARENT/GUARDIAN IS REQUIRED:

SIGNATURE OF Parent/Guardian: _____ Date: _____.

ADDITIONAL INFORMATION

1. Swimming Experience: _____

2. Next of Kin (to be notified in an emergency):

Name: _____
Address: _____
Phone: _____ Relationship: _____

3. Swim Plan:

Date of Swim: _____
Back-Up Date: _____
Departure Point: _____
Destination: _____

Note: Weather at the end of August is often unstable. Swimmers should try to book in July or the first half of August or risk being on a Waiting List with others whose swims were postponed or risk running out of warm-enough weather altogether.

4. Deadline:

The Registration Form and the Registration Fee (see Appendix 5) must be submitted in order for the swimmer to be registered, and Solo Swims of Ontario must receive both not later than eight weeks prior to the planned date of the swim, AND NO LATER THAN APRIL 30.

The Forms and Fee shall be submitted to:

Dr M. Korzekwa, MD, 980 Queenston Road, Suite 302
Stoney Creek, Ontario, Canada, L8G 1B9

5. Insurance:

For swimmers who are not citizens of Canada or legal Landed Immigrants, they must provide evidence of adequate personal insurance at the time of registration for the swim. The swimmer's certificate of insurance must show Solo Swims of Ontario Inc. as an additional insured. For those who do not have suitable existing insurance coverage, they may contact SSO's insurers through the following contact to obtain suitable coverage:

Marie Farley, a.v.c./RLU
BFL Canada services conseils inc.
2200-2201 av. McGill College
Montréal (Québec), H3A 1G1
514-315-3338 mfarley@BFLCANADA.ca



Appendix 2



SSO Relay Registration Form

NAME OF COACH: (See Section 3B): _____.

ADDRESS: _____
_____.

PHONE: (HOME) _____ (BUSINESS) _____.

E-MAIL: (HOME) _____ (BUSINESS) _____.

NAME OF RELAY TEAM CAPTAIN: _____.

ADDRESS: _____.

PHONE: (HOME) _____ (BUSINESS) _____.

E-MAIL: (HOME) _____ (BUSINESS) _____.

Swim Plan:

Date of Swim: _____.

Back-Up Date: _____.

Departure Point: _____.

Destination: _____.

Number of Swimmers: _____.

Duration of each swimmer's leg swim: _____.

Standard Relay or Non-Standard Relay

In consideration of your acceptance of this Registration Form, on behalf of the relay team, I have read the Regulations and Information, including the Rules, and I agree to inform all members of the relay team and will abide by the same if the relay is sanctioned. The coach also agrees to bring on board all the swimmer's pertinent medical details and list of kin notification information.

SIGNATURE OF COACH: _____ Date: _____.

SIGNATURE OF CAPTAIN: _____ Date: _____.

IF CAPTAIN IS UNDER 18 YEARS OLD, SIGNATURE OF PARENT/GUARDIAN IS REQUIRED:

SIGNATURE OF Parent/Guardian: _____ Date: _____.

Appendix 3 Registration, Insurance Part 1

ASSUMPTION AND ACKNOWLEDGMENT OF RISK

I UNDERSTAND AND AGREE, on behalf of myself, my heirs, assigns, personal representatives and next of kin that my participation in the events and related activities of **SOLO SWIMS OF ONTARIO**, is not permitted without my execution of this document. I hereby warrant and agree that:

1. I know that there is always the risk of serious injury or death resulting from participation in any form of organized recreational activity, and particularly those involving solo swimming competitions, fitness activities, personal training instruction, swim training and like activities offered as part of the program of **SOLO SWIMS OF ONTARIO**, and
2. I acknowledge and accept these risks and all other risks associated with participation in these events and programs even if arising from the negligence or gross negligence, including any worsening of injuries caused by negligent rescue operations or procedures, of **SOLO SWIMS OF ONTARIO**, event and program organizers, the activity venues and any and all persons associated therewith or participating therein including those involved in transportation to and from events and activities; and
3. I understand that all applicable rules for participation must be followed and that at all times **THE SOLE RESPONSIBILITY FOR MY PERSONAL SAFETY REMAINS WITH ME;**
4. I will immediately remove myself from participation in any event or program and notify the nearest official, if at any time I sense any unusual hazard or unsafe condition or if I feel that I am physically, emotionally or mentally unfit, or if I feel that my equipment is not fit or appropriate, for continued participation;
5. I am _____years of age (Minimum 14).

I HAVE READ AND UNDERSTAND THIS DOCUMENT AND I AM AWARE THAT BY SIGNING THIS ASSUMPTION AND ACKNOWLEDGMENT OF RISK I AND/OR MY PARENTS/GUARDIANS MAY SURRENDER CERTAIN LEGAL RIGHTS.

I SIGN THIS DOCUMENT VOLUNTARILY AND WITHOUT INDUCEMENT

this ___ day of _____, 20 __, at _____, Ontario, Canada

Witness to the Signature of Participant

Signature of Participant

Printed name of witness

Printed name of Participant

14911.0001/935819_1

Appendix 3 Registration, Insurance Part 2 – Adult version

RELEASE OF LIABILITY, WAIVER OF CLAIMS, ASSUMPTION OF RISKS AND INDEMNITY AGREEMENT

**BY SIGNING THIS DOCUMENT, YOU WILL WAIVE CERTAIN LEGAL RIGHTS,
INCLUDING THE RIGHT TO SUE.**

PLEASE READ CAREFULLY!

In consideration for allowing me to participate in any or all of the games, events and related activities of ***SOLO SWIMS OF ONTARIO***, I hereby warrant and agree that:

1. I am familiar with and accept that there is always the risk of serious injury and death resulting from participation in any organized recreational activity particularly those involving solo swimming competitions, fitness activities, personal training instruction, swim training and like activities offered as part of the ***SOLO SWIMS OF ONTARIO*** program; and
2. I have satisfied myself, and believe, that I am physically, emotionally and mentally able to participate in this program, and that my equipment is appropriate for use in this program; and
3. I understand that all applicable rules for participation must be followed and that at all times the sole responsibility for personal safety remains with me; and
4. I have obtained and read the LATEST SSO Covid-19 self-screening document and I attest that I do not have any of the symptoms or exposures in the last 2 weeks that are detailed in the document; and
5. I will observe all of public health's and Solo Swims of Ontario's social distancing, sanitizing, and mask rules; and
6. I will immediately remove myself from participation, and notify the nearest official, if at any time I sense or observe any unusual hazard or unsafe condition or if I experience any deterioration in my physical, emotional or mental fitness, or that of my equipment, or exceed my comfort level, for continued participation in any event or related activity.

I UNDERSTAND AND AGREE, ON BEHALF OF MYSELF, MY HEIRS, ASSIGNS, PERSONAL REPRESENTATIVES AND NEXT OF KIN THAT MY EXECUTION OF THIS DOCUMENT CONSTITUTES:

1. AN UNQUALIFIED ASSUMPTION BY ME OF ALL RISKS associated with my participation in any or all of the events and related activities of ***SOLO SWIMS OF ONTARIO***, even if arising from the negligence or gross negligence, including the risk of contracting Covid-19, including any compounding or aggravation of injuries caused by negligent rescue operations or procedures, of the aforementioned parties or any event

organizer, event venue and any and all persons associated therewith or participating therein in any capacity; or in transportation to and from such events and activities, and

2. A FULL AND FINAL RELEASE AND WAIVER OF LIABILITY AND ALL CLAIMS that I have, or may in the future have, against **SOLO SWIMS OF ONTARIO**, event sponsors, event venues, and their respective directors, officers, employees, coaches, Swim Masters, leaders, instructors, contractors, agents and representatives, advertisers, volunteers, others participating in any capacity, (all of whom are collectively referred to as “the Releasees”) from any and all liability for any loss, damage, injury or expense that I may suffer as a result of my use of or my presence at event facilities, or my participation in any part of, or presence at, any or all of the events and related activities of the Releasees due to any cause whatsoever, INCLUDING NEGLIGENCE, GROSS NEGLIGENCE, BREACH OF CONTRACT, OR BREACH OF ANY STATUTORY OR OTHER DUTY OF CARE, INCLUDING ANY DUTY OF CARE OWED UNDER THE OCCUPIERS LIABILITY ACT, ONTARIO ON THE PART OF THE RELEASEES.
3. AN AGREEMENT NOT TO SUE THE RELEASEES for any loss, injury, costs or damages of any form or type, howsoever caused or arising, and whether directly or indirectly, from my participation in any aspect of the said events and related activities; and
4. AN AGREEMENT TO INDEMNIFY, and to SAVE and HOLD HARMLESS the RELEASEES, and each of them, from any litigation expense, legal fees, liability, damage, award or cost, of any form or type whatsoever, they may incur due to any claim made against them or any one of them whether the claim is based on the negligence or the gross negligence of the Releasees or otherwise.
5. An agreement that this document be governed by the laws, and in the courts of the Province of Ontario.

I HAVE READ AND UNDERSTAND THIS AGREEMENT AND I AM AWARE THAT BY SIGNING THIS AGREEMENT I AM WAIVING CERTAIN SUBSTANTIAL LEGAL RIGHTS WHICH I AND MY HEIRS, NEXT OF KIN, EXECUTORS, ADMINISTRATORS AND ASSIGNS MAY HAVE AGAINST THE RELEASEES. I SIGN THIS DOCUMENT VOLUNTARILY AND WITHOUT INDUCEMENT this _____ day of _____ 20__ at _____, Ontario, Canada.

Signature of Participant

Printed name of Participant

Signature of Witness

Printed name of Witness

14911.0001/935816_1

Appendix 3 Registration, Insurance Part 2 – Minor Child version

**RELEASE OF LIABILITY, WAIVER OF CLAIMS, ASSUMPTION OF RISKS
AND INDEMNITY AGREEMENT**

**BY SIGNING THIS DOCUMENT YOU WILL WAIVE CERTAIN LEGAL RIGHTS,
INCLUDING THE RIGHT TO SUE.**

PLEASE READ CAREFULLY!

In consideration for allowing my minor child/ward to participate in all related events and activities of ***SOLO SWIMS OF ONTARIO***, I hereby warrant and agree that:

1. I am the parent/guardian having full legal responsibility for decisions regarding my minor child/ward, ***namely*** _____; and
2. I am familiar with and accept, on behalf of myself and my minor child/ward that there is the risk of serious injury and death from participation in any organized recreational activity particularly those involving solo swim competitions, fitness activities, personal training, swim training and like activities offered as part of the program of ***SOLO SWIMS OF ONTARIO***; and
3. I have satisfied myself and believe that my minor child/ward is physically, emotionally and mentally able to participate in this program, and that his/her equipment is mechanically fit and appropriate for his/her use in this event; and
4. I understand, and will instruct my minor child/ward, that all applicable rules for participation must be followed and that at all times the sole responsibility for personal safety remains with my minor child/ward; and
5. I have obtained and read the LATEST SSO Covid-19 self-screening document, and I attest that I do not have any of the symptoms or exposures in the last 2 weeks that are detailed in the document; and
6. I will observe all of public health's and Solo Swims of Ontario's social distancing, sanitizing, and mask rules; and
7. I will immediately remove my minor child/ward from participation, and notify the nearest official, if at any time I sense or observe any unusual hazard or unsafe condition or if I feel that my minor child/ward has experienced any deterioration in his/her physical, emotional or mental fitness, or in the adequacy of his/her equipment, for continued participation in the event or activity.

I UNDERSTAND AND AGREE, ON BEHALF OF MY MINOR CHILD/WARD, HIS/HER HEIRS, ASSIGNS, PERSONAL REPRESENTATIVES AND NEXT OF KIN, MYSELF, MY HEIRS, ASSIGNS, PERSONAL REPRESENTATIVES AND NEXT OF KIN THAT MY EXECUTION OF THIS DOCUMENT CONSTITUTES:

1. AN UNQUALIFIED ASSUMPTION OF ALL RISKS associated with participation in the events and activities of ***SOLO SWIMS OF ONTARIO***, by my minor child/ward even if arising from negligence or gross negligence, including the risk of contracting Covid-19,

including any compounding or aggravation of injuries, caused by negligent rescue operations or procedures, of the event organizer, the event venues and any persons associated therewith or participating therein; and

2. A FULL AND FINAL RELEASE AND WAIVER OF LIABILITY AND ALL CLAIMS that I have or may in the future have against **SOLO SWIMS OF ONTARIO**, event sponsors, event venues, and their respective directors, officers, employees, coaches, Swim Masters, instructors, contractors, agents and representatives, advertisers, volunteers, other participants, (all of whom are collectively referred to as “the Releasees”) from any and all liability for any loss, damage, injury or expense that my minor child/ward may suffer, or that his/her next of kin may suffer as a result of his/her use of or my presence at the event facilities or my child’s/ward’s participation in any part of, or presence at, the events and activities of **SOLO SWIMS OF ONTARIO**, due to any cause whatsoever, INCLUDING NEGLIGENCE, GROSS NEGLIGENCE, BREACH OF CONTRACT, OR BREACH OF ANY STATUTORY OR OTHER DUTY OF CARE, INCLUDING ANY DUTY OF CARE OWED UNDER THE *OCCUPIERS LIABILITY ACT*, ONTARIO, ON THE PART OF THE RELEASEES.
3. AN AGREEMENT NOT TO SUE THE RELEASEES for any loss, injury, costs or damages of any form or type, howsoever caused or arising, and whether directly or indirectly from the participation of my minor child/ward in any aspect of the events and activities of **SOLO SWIMS OF ONTARIO**; and
4. AN AGREEMENT TO INDEMNIFY, and to SAVE and HOLD HARMLESS the RELEASEES, and each of them, from any litigation expense, legal fees, liability, damage, award or cost, of any form or type whatsoever, they may incur due to any claim made against them or any one of them whether the claim is based on the negligence or the gross negligence of the Releasees or otherwise.
5. An agreement that this document be governed by the laws, and in the courts of the Province of Ontario.

I HAVE READ AND UNDERSTAND THIS AGREEMENT AND I AM AWARE THAT BY SIGNING THIS AGREEMENT I AM WAIVING CERTAIN SUBSTANTIAL LEGAL RIGHTS WHICH MY MINOR CHILD/WARD, HIS/HER HEIRS, NEXT OF KIN, EXECUTORS, ADMINISTRATORS AND ASSIGNS AND I AND/OR MY MINOR CHILD/WARD MAY HAVE AGAINST THE RELEASEES.

I SIGN THIS DOCUMENT VOLUNTARILY AND WITHOUT INDUCEMENT this ____ day of _____ 20__ at _____, Ontario, Canada

Signature of Parent/Guardian

Printed name of Parent/Guardian

Signature of Witness

Printed name of Witness

14911.0001/935825_1

Appendix 4

Medical Form

To be completed in the year of the proposed swim – No Earlier

Part A: Medical History

Name: _____.

Address: _____.

_____.

Postal Code: _____ Telephone: (_____) _____.

Occupation: _____.

Gender: _____ Date of Birth: _____ Age (Minimum 14): _____.

Do you suffer now, or have you suffered in the past, from any of the following disorders:

	YES	NO
1. Ear trouble, earache, discharge, or deafness?	_ _	_ _
2. Sinus trouble?	_ _	_ _
3. Chest disease, including asthma, bronchitis, tuberculosis, or collapsed lung?	_ _	_ _
4. Blackouts or fainting?	_ _	_ _
5. Seizures, epilepsy, fainting spells, black-outs, or any neurological disorders, including persistent headaches or concussion?	_ _	_ _
6. Anxiety, "nerves", or nervous breakdown?	_ _	_ _
7. Diseases or conditions of the heart and circulation, including high blood pressure and arrhythmias?	_ _	_ _
8. Diabetes?	_ _	_ _
9. Food or medication allergies?	_ _	_ _

Please answer the following questions:

1. Do you regularly or frequently take any medication or other treatment, with or without prescription?	_ _	_ _
2. Are you currently receiving medical care?	_ _	_ _
3. Have you consulted a doctor, other than for colds, influenza, etc., in the past 12 months?	_ _	_ _
4. Have you had any cardiac investigations in the last TWO years including electrocardiogram, cardiac echo (ultrasound), or stress test?	_ _	_ _
5. Have you ever been refused life insurance, or failed a medical examination?	_ _	_ _
6. Have you ever been admitted to hospital, other than for broken bones?	_ _	_ _
7. Do you smoke?	_ _	_ _
8. Have you had a previous medical examination for SSO and was it satisfactory?	_ _	_ _
9. Have you ever seen a cardiologist?	_ _	_ _

Please give further details if the answer is YES to any question, or if there is anything relevant SSO should know about your medical history. Attach an additional sheet if necessary:

_____.

_____.

_____.

Please list all medications that you will be taking on the day of the start of the swim and during the swim. These items must be approved in advance by the SSO Medical Officer:

_____.

_____.

Name of Family Doctor: _____.

Address: _____.

_____.

Postal Code: _____ Telephone: (_____) _____.

Declaration: I hereby declare that, to the best of my knowledge, I am in good general health, and declare that I have not omitted any information either to the examining doctor or to Solo Swims of Ontario, which might be relevant to my fitness and capability to attempt a marathon swim.

I will immediately disclose to SSO any new medical condition arising between completion of this form and either my Trial Swim or Marathon Swim.

I hereby authorize my medical attendants to disclose any details of my past or present medical history, if requested to do so, to the Medical Officer of Solo Swims of Ontario.

I also agree that relevant information about my health may be disclosed to the Swim Master.

Signed: _____.

Dated: _____.

Witness (Examining Doctor): _____.

Note: The physical examination will take your doctor some time to complete. You should book an appropriate appointment.

The fee in respect of this medical examination is the responsibility of the swimmer.

The completed Medical Form should be returned to the Medical Officer of Solo Swims at the address below, not later than TWO weeks before the Trial swim. Receipt of the Medical Form is required for sanction.

Dr M. Korzekwa, MD,
980 Queenston Road, Suite 302
Stoney Creek, Ontario
Canada, L8G 1B9

Part B: Current Physical Examination

Name of Swimmer: _____.

The above-named swimmer wishes to receive a medical examination in order to check his/her physical fitness to attempt a marathon swim, which represents a very arduous undertaking. (See Note 1 below.)

HEIGHT: _____ WEIGHT: _____ BP _____ HEART RATE: _____.

EARS: R. Drum _____ R. Canal _____ L. Drum _____ R. Canal _____.

SINUSES, NOSE, THROAT: _____.

URINE: Protein _____ Sugar _____.

CHEST: _____.

CARDIOVASCULAR SYSTEM: _____.

ECG (Note 2): _____.

ABDOMEN: _____.

NERVOUS SYSTEM: _____.

JOINTS/LIMBS (Note 3): _____.

REMARKS: _____.

_____.

_____.

Upon examination, I consider _____ to be _____ (Insert FIT or UNFIT) to attempt a marathon swim.

Signature of Examining Doctor: _____.

Date: _____ Telephone: (_____) _____.

Note 1: Any doubts concerning a swimmer's fitness may be clarified by contacting the Medical Officer of Solo Swims of Ontario, Dr Marilyn Korzekwa, MD, 980 Queenston Road, Suite 302, Stoney Creek, Ontario, Canada, L8G 1B9. Telephone: 905-662-0440.

Note 2: An ECG, taken in the calendar year of the proposed swim, is a definite requirement for any swimmer over the age of 40 years, or if any abnormality is found on the CVS.

Note 3: Solo Swims welcomes and admires disabled swimmers who wish to attempt a marathon swim. Physical handicaps, such as absent limbs, do not rule out a marathon swim attempt.

Appendix 5

Swimmer Fees

Any person contemplating a swim across a Great Lake and who wishes to be sanctioned by Solo Swims of Ontario Inc. ("SSO") shall be subject to various fees, as set out below. Some of these fees are mandatory, while others are optional depending upon whether or not the swimmer is able to make alternative arrangements that are acceptable to SSO. All fees shall be made payable to "Solo Swims of Ontario" in Canadian dollars.

Note: If a swimmer registers to complete one marathon swim with SSO and intends to use a portion of that swim as their Trial Swim for another marathon swim with SSO, both marathon swims will be charged at the full rate for marathon swims.

The fees are set up on a **two**-tier structure, as follows:

Tier 1: Registration Fee: \$1,250, \$1,500 or \$1,750

The Registration Fee for a swim is determined as follows:

- (a) \$1,250 if the swim is less than 17 statute (land) miles (27 km).
- (b) \$1,500 if the swim is greater than 17 statute miles (27 km) and one Swim Master can manage the swim safely.
- (c) \$1,750 if the swim is sufficiently long that it will require two Swim Masters for its safe management. The definition of a "long swim" generally covers any swim that is expected to last more than 24 hours.
- (d) Late Registrations after April 30 will be charged an extra \$250, may not be able to attend the Swimmer's Workshop, and cannot be guaranteed a Swim Master.

The Registration Fee covers SSO's cost of administering all aspects of the swim. It provides for the Swim Master, SSO's Liability Insurance, and Administration. The swimmer's requested swim date will not be reserved until this fee has been received in full and has cleared payment. Services provided include:

- (a) Recording the registration;
- (b) Providing acknowledgement of the application;
- (c) Providing advice on all aspects of the swim, including training, nutrition, and organization;
- (e) Any SSO-provided safety items such as measurement of core-body temperature;
- (f) All mail (postal and e-mail), fax, and telephone correspondence;
- (g) Conducting and supervising the Trial swim;
- (h) SSO is a registered charity, so the swimmer is exempted the standard registration fee of the Toronto Port Authority which, in 2005, was \$100 plus GST, and;
- (h) Issuing a certificate in recognition of a completed swim.

Once a Swim Registration has been processed and a receipt issued, cancellation of the swim can involve a refund of a portion of the fee. The extent of the refund depends upon the following circumstances:

- (a) With cancellations between May 1 and June 15 in the year of the proposed swim, the Registrant shall be issued a refund of the fee less \$250 administrative fee.
- (b) Cancellation of the swim by a Registrant after June 15 will be refunded their total fee minus \$500 administrative fee.
- (c) Cancellations after the Trial Swim will not receive a refund.

Tier 2: Swim Master's Expenses:

If the swim proceeds, the swimmer shall provide the following services for the Swim Master:

- (a) Provide, or pay for, the transportation of the Swim Master to the starting point of the swim at 52¢ per kilometre, plus any entrance fees;
- (b) If accommodation is required, pay for the Swim Master's hotel accommodation, or provide accommodation acceptable to the Swim Master;
- (c) If necessary, pay for the Swim Master's meals before the swim, to a maximum of \$60 per diem; and
- (d) Provide meals during the swim itself.
- (e) Provide, or pay for, the transportation home for the Swim Master at 52¢ per kilometre.

None of these costs are covered by the Swim Master's honorarium.

Appendix 6

Nutrition

Nutrition can affect sport performance in a variety of ways. There are over 50 nutrients the body requires on a daily basis. There is no perfect diet, but the optimal is one that keeps the athlete well hydrated, provides adequate calories, and supplies the 50-plus nutrients in the needed amounts. No single food or supplement can meet these requirements. They are best achieved by consuming a wide variety of foods on a daily basis. A proper diet is essential for maintaining energy levels, developing muscles, and increasing endurance and strength.

The most important nutrient for the athlete is *water*. Water is necessary for the body's cooling system. It transports the body's nutrients throughout the tissues and maintains adequate blood volume. During intense or prolonged exercise, the body's thirst mechanism lags behind actual need, thus it is important to make a conscious effort to drink water long before thirst occurs. When swimming, it is difficult for a marathon swimmer to gauge how much fluid loss is occurring. Therefore, it is extremely important to drink fluids regularly during a marathon swim. During events lasting longer than 3 hours, electrolyte replacement is also necessary. "Sport Drinks" are ideal to replace fluid sodium, potassium and carbohydrate losses. Salt tablets should be avoided. Quick energy foods, such as chocolate bars, should be avoided as they may cause retention of fluids in the digestive tract possibly causing nausea, cramps, and dehydration.

Most long-distance swimmers have heard of "hitting the wall" or have actually experienced the sensation. This sudden, overwhelming wave of physical and mental fatigue strikes when the body's energy reserves in the form of carbohydrates are all but exhausted. Intense or prolonged exercise can markedly deplete the body's energy reserves within a few hours, depending upon the athlete's fitness level and on the amount of reserves in the body. When this happens, the muscles cease to function efficiently, the athlete experiences extreme exhaustion, and confusion or disorientation can occur.

Marathon swimmers can avoid or minimize the effect of "hitting the wall" by consuming carbohydrates during the swim in the form of easily digestible liquids.

NOTE: Do not experiment with new foods just prior to or during the swim as they can adversely affect the digestive system and lead to cramps or vomiting. The appropriate time to test the suitability of foods is on the Trial Swim.

The most important rule to remember is to keep well hydrated, both before and during the marathon swim.

Appendix 7

Hypothermia

Hypothermia is a condition caused by the lowering of the internal body temperature. Specifically, a hypothermic person is one whose core temperature registers below 34.5°C (94°F).

On a long-distance swim, the potentially most dangerous problem comes from the swimmer suffering some form of hypothermia. It can be lethal, and it requires immediate and specialized medical care.

As the swimmer's body temperature declines, certain symptoms occur such as shivering, slurred speech, slow breathing, clumsiness, confusion, disorientation, amnesia, sleepiness, and irritability. In addition, hypothermia can cause impairment of sensory functions and motor performance, reflected in marathon swimmers by an unusual stroke pattern and/or directional instability.

One of the dangers to those who are monitoring the progress of the swimmer is distinguishing between hypothermia and extreme fatigue, both of which commonly occur with marathon swimmers. With proper safety precautions, a swimmer with a normal core temperature can swim to a point of near exhaustion without jeopardizing the swimmer's health; however, if the swimmer is suffering from hypothermia, and not from extreme fatigue, and is allowed to continue, then tragedy can result.

Death from hypothermia is cardiac in origin, and this is the most important physiological disturbance to occur in cold water.

The rate of heat loss from the body is caused by two factors. The first is the rate of heat transfer from the body core to the skin. This rate is influenced by the degree of blood flow and the amount of tissue insulation. Abundant amounts of subcutaneous fat will improve the body's ability to conserve heat.

The most important factors influencing the development of hypothermia in marathon swimmers are:

- (1) Amount of subcutaneous fat and body surface area.
- (2) Water temperature.
- (3) Duration of swim.
- (4) Amount of body and water movement.
- (5) Body heat production, which depends to some extent on the number of calories and fluid ingested.

Resistance to cold in marathon swimmers depends primarily upon the thermal insulation provided by their subcutaneous fat. Other important factors are body size and body heat production. These three factors together are mainly responsible for the maintenance of thermal balance in cold water.

Solo Swims includes a low-temperature thermometer in its First-Aid Kit. Use of this thermometer should be known by the Swim Master, the swimmer's coach, the swimmer's doctor, or other appropriate person.

The following page sets out by temperature range the signs and symptoms of hypothermia.

Signs and Symptoms of Hypothermia

Condition	Core Temperature		Comments
	°C	°F	
Normal	37.0	98.6	Normal body temperature
Mild Hypothermia	36.9 - 36.1	98.4 – 97.0	Goose bumps. Sporadic shivering.
	35.5	96.0	Uncontrollable shivering
	35.0	95.0	Voluntary tolerance limit in non-fatigued swimmer. Deep cold. Numbness. Blue skin
Moderate Hypothermia	34.9 – 34.3	94.9 – 94.0	Mental confusion begins. Motor performance impaired: slurred speech, incoordination, “claw hand” or other muscle stiffness. Skin may be grey.
	32.8	91.0	Severe mental confusion. Grossly impaired motor performance. Shivering impaired.
Severe Hypothermia	32.2 – 31.1	90.0 – 88.0	Heart rhythm irregularities. Severe disorientation, hallucinations. Rapid deterioration in motor performance: a drop in stroke-rate, hip drop, or directional instability. Dilated pupils. Grey-white skin. Shivering stops
	31.0 – 30.0	88.0 – 86.0	Loss of consciousness. No response to pain.
	28.0	82.4	Ventricular arrhythmias
	<26.6	<80.0	Death

Appendix 8

Early Season Advice

Unless the swimmer has a coach experienced in marathon swimming, the swimmer will have many questions. The swimmer usually has an amateur competitive coach who is willing to offer some extra time and come on the swim. For the purposes of motivation and safety, it is essential for the Coach to have had a close working relationship with the swimmer. In the event of the gradual onset of hypothermia, the effectiveness of cognitive questions can depend totally on the swimmer (age, technical knowledge, arts knowledge, medical background such as Asperger's Syndrome, etc.). The following information is specific for marathon swims across Lake Ontario from south to north.

Training:

Physically, the swimmer should swim with a competitive swim club for at least 6 workouts a week until about March. Weight training, particularly exercises designed to strengthen the core and the rotator-cuff muscles, is an important addition to the training programme. In March or April, the emphasis switches from speed to distance, building up to 45-50 km per week by the end of May. In June, the venue switches to small warmer lakes with a "long swim" of 12-16 km every weekend and 6-8 km on weekdays for a total of 50-60 km per week. These long slow distance (LSD) workouts can be varied by timed swims of varying distance, with kick sets, or with "fartlek" intervals. Fartlek means slow/fast and refers to a continuous swim with sprint sections alternating with brief slow "rest" sections. One or two interval workouts in the pool per week help maintain speed. The strokes can be varied but most swimmers find front crawl to be most efficient and least wearing on the joints for LSD swimming. Breaststroke doesn't maintain body temperature or speed against a headwind. Helping a backstroker swim in a straight line in open water is a nightmare for the crew. Treading water holding a brick, working up to 10 minutes daily, is good preparation for feeding times. In mid to late June, Lake Ontario warms up to over 14°C and as many workouts as possible should be in the lake. It is helpful to the swimmer's confidence to have completed at least one 10-mile (16-km) swim before the Trial Swim. Three or four weeks before the big swim, a 15-20 mile (24-30 km) swim does wonders for the swimmer's confidence (and conditioning). Care should be taken not to damage the joints (stop if there is undue pain) and to rest the day before and one or two days after. Finally, for those who really want to simulate the muscular fatigue of a 52-km swim, a 16-km swim in a short sleeve sweatshirt, sweatpants and sneakers can be tried.

Open Water:

Open water swimming presents challenges to which the swimmer should become accustomed before the big swim. The only way to get used to waves is to swim in all kinds of weather (except thunderstorms and fog). One pre-swim application of sunscreen cannot protect a swimmer from sunrise to sunset. Therefore, a tan should be slowly built up. Learning to swim in a straight line and only looking-up about every 10th stroke is a challenge for some. Bilateral breathing is an asset (prevents unilateral sore neck). The swimmer should get practice swimming beside a boat at 2-3 metres away. With practice, they can judge the boat's angle and distance while breathing to the side and adjust their stroke without stopping. Night swimming should be practiced at least once in a familiar lake with a familiar boat and driver. For those who find it frightening, they should keep practicing night swimming until the fear dies down. At night, the swimmer should have attached a chemical glow stick (Cyalume[®]) or be illuminated from the boat. Also, at night the swimmer should swim closer to the boat, at about 2 metres.

Open Water Safety:

Open water swimming also presents dangers. The swimmer should never swim alone because of medical risks (cramps, heart problems, seizures) and the possibility of being run over by a boat. Swimming parallel to shore is acceptable, if supervised by someone walking. When swimming in open water, water-safety equipment (throw rope, floatation device, life jackets, and/or swim ladder) and re-warming equipment (blankets and hot drinks) should be available. Boat drivers should always take care to switch the boat into neutral when talking to the swimmer. Wind and waves necessitate keeping the boat further away from the swimmer. The workout may need to be called off if the boat has difficulty negotiating the waves and the spotter cannot see the swimmer at all times. A swimmer should also learn to stay closer to the guide boat when surrounded by heavy boat traffic.

Pacers:

Open water swims are a good opportunity to train pacers. Furthermore, pacers also need to acclimatize to waves and cold. Most front crawl swimmers prefer their pacer to swim about one head ahead of them and about an arm's length away. When the pacer is a little ahead, it is motivating to the swimmer. The pacer should never be behind, as the swimmer slows down when he or she looks backwards. Most swimmers also find it motivating if the pacer matches the rhythm of their arm pull to the swimmer's rhythm (on the swimmer's breathing side). Thus, it appears that an invisible string from the pacer's arm is pulling the swimmer's arm through the recovery phase. The pacer may need to drag their feet and/or adjust the length of their other arm's stroke to be able to keep up this rhythm. The best pacers match the swimmer's rhythm initially but then subtly pick it up and keep it speeded up. Smiling during breaths or underwater can pick up the swimmer's morale.

NOTE: Pacers, however, are not permitted during the Trial Swim.

Hypothermia:

Cold water is part of what makes Lake Ontario one of the five toughest swims in the world. (Being blown past Toronto is the other reason). Lake Ontario is very deep, up to 200 metres in places. Most of this vast body of water is at 4°C year-round. Only the surface layers warm up with warm weather. The different layers are called thermoclines. The depth of the top warm layer varies tremendously from year to year. A strong wind can churn up the lake and bring the cold water to the surface in a matter of hours. The temperature can go from 20°C to 10°C from one day to the next (See Appendix 11). This can even happen during a swim, pockets of cold water may be left over from the last storm, a freighter may have churned up cold water for a ½ km swath, or the 5-8 kilometres near one shoreline may be cold due to wind effect. Therefore, the swimmer has to be acclimatized to swimming in cold water. Cold showers and sleeping with open windows all winter are not necessary as the body only needs 1-2 weeks to acclimatize. Swimming in Lake Ontario from 14°C and up daily for 4-6 weeks usually suffices. Care should be taken to avoid hypothermia by limiting the duration of very cold workouts or by coming out when the swimmer can't stand it any longer. This "voluntary tolerance limit" can be increased by longer exposures every swim. A cap and ear plugs reduce heat loss and prevent hypothermia. Don't forget that swimming faster keeps one warmer. The ability to resist hypothermia is a measure of fitness and body fat. Swimmers must rewarm immediately when muscles start to cramp. "After drop" is the phenomenon where the body's core temperature drops during re-warming because cold blood from the extremities is returning to the core. Because of this effect, some means of re-warming should be available at all cold-water workouts (blanket, hot drink in thermos, car with heater). Don't forget to take off wet clothes. Care should also be taken to enter very cold water slowly to prevent heart arrhythmias or choking. Walk in, splash the face and neck, and then bob up and down before swimming.

Penny Lee Dean, in her book *Open Water Swimming*, recommends that the coach should have a discussion with the swimmer, at least 2 months before the swim. The coach asks about 25 to 40 personal questions from the past such as names, dates, colours of bikes or cars, favourite subjects, mother's birthday, *etc.* The coach writes these down and brings them on the swim to test the swimmer's orientation and ability to think, if hypothermia is a question, as this is a very important symptom to monitor.

Weight Gain:

Should swimmers gain weight for more insulation? If they are very lean, (less than 12% body fat for males; 16% for females), they could do this gradually throughout the season. If they have the average amount of body fat, they could wait until about 2 weeks before the swim to decide. The anticipated water and air temperature will be the deciding factors. It is a strain on the heart to carry the extra weight throughout the training season. In the end, cardio-vascular fitness is probably a greater factor for success than above average body fat composition.

Psychological Factors:

Psychological preparation is the key to pushing the body beyond all limits. The swimmer should start by setting smaller goals, for example, the Trial Swim, the 28 km swim ("I can do more than half the Lake"), and the sweatshirt swim ("I can take the fatigue"). They also need to imagine the big swim during workouts - for example, imagining how they will cope with the last 8 km and how the finish will look and feel. Visiting all potential finishing sites is enormously helpful. A large nautical chart of Lake Ontario on the wall helps them "*Think Lake Ontario*" at home. How does a swimmer cope with the long hours of mental monotony? Everyone develops their own solution during LSD training. Some count, some memorize songs or poems ahead of time, some engage in elaborate fantasies and others have the ability to "space-out" in a kind of self-hypnotic state. Pre-swim anxiety can be managed by practicing relaxation techniques ahead of time. Everyone has their "ideal performance state" for peak performance and too much anxiety can be detrimental (loss of focus, insomnia, migraines). The swimmer should share their dreams, goals and motivational statements with the coach, preferably in writing, for use during the swim.

If the swimmer is under 18 years of age, it is strongly recommended that the Swim Master should meet with the parents and explain the risks and safety precautions as well as answer all their questions.

Swimming Equipment:

The swimmer can be testing out their swimming gear during workouts. Tinted, ultra-violet filtering goggles for daytime and clear goggles for night-time should fit well and stay on in waves but not cause eye or headache on long swims. They can be pre-treated with anti-fog liquid. Neoprene is not allowed for the swim cap but more than one can be used (recommended in cold water). Silicone-rubber caps are thick. Choose bright colours for visibility. "The swimsuit cannot aid in buoyancy or warmth". Wetsuits are not allowed. The swimsuit should be comfortable and not cause excessive drag (should fit high up the chest and snugly in the small of the back for women) nor rub (avoid wide shoulder straps for women and tight leg openings for men). Being clean-shaven reduces shoulder rub for men. Lanolin or Vaseline applied to the neck and armpits for women and to the neck and groin for men prevents nasty rub marks during training. Custom earplugs are expensive and may require lanolin or Vaseline to provide a seal. Wax or silicone earplugs can be moulded and are cheap enough that extras can be taken. Earplugs and swim caps reduce heat loss tremendously. On the big swim, extras of all of the above can go in a bag with a towel in the Zodiac to accompany the swimmer.

Swim Food:

Exercise physiologists have concluded that for events lasting greater than 3 hours, where the exercise intensity is 30-70% of maximum, the nutrition concerns are:

1. Glycogen replacement;
2. The prevention of dehydration; and

3. Hyponatremia (dangerously low sodium in the blood which occurs when only water is consumed).

To this list, the marathon swimmer must add:

4. Prevention of hypothermia.

The American College of Sports Medicine recommends that the average 70 kg endurance athlete drink 500-1000 ml (2-4 cups) per hour of electrolyte replacement drink containing 6-8% carbohydrates (60-80 g per litre), 20-30 mEq per litre of Sodium, and 20-30 mEq per litre of Chloride. Since the marathon swimmer probably sweats less than the marathon runner, the swimmer's fluid requirements may be at the lower end of the range, *i.e.* 2-3 cups (500-750 mL) per hour. Hypothermia causes the body to burn extra calories; therefore, the carbohydrate requirements may be at the upper end of the range, *i.e.* 80 g per litre. Also, in cold water, a swimmer's drinks need to be warmed.

The swimmer has a choice in planning "swimming food". They could either drink the perfect carbohydrate-electrolyte replacement drink (Gatorade reconstituted from powder, in 750 mL, instead of 1000 mL) for the whole swim or they could mix and match clear fluids with higher calorie drinks on each feeding, as long as the fluid replacement totals 2-4 cups per hour and there is some salt (electrolyte) content. The problem with Gatorade-like drinks alone is that this may not provide enough calories, especially if the swimmer weighs more than 70 kg. Also, Gatorade is not tasty when warm. The problem with solutions more concentrated than 8% carbohydrate is that they delay stomach emptying (normally taking 20-30 minutes for water) causing a sensation of fullness or even nausea. This may be more of a concern towards the end of a swim.

SSO recommends a variety of cold and hot milk-based, fruit juice-based, and sweetened clear fluids as well as carbohydrate-electrolyte replacement drinks. Examples include Ensure, Boost, fruit sport drinks, blended canned peaches with corn syrup, blended canned fruit cocktail, blended soup, cup-a-soup without noodles, tea, coffee, juice, soft drinks and Gatorade. New high energy products are PowerGel and GlycoMax. Some swimmers like Boost (comes in blueberry) and Ensure, but many of the ingredients in these drinks are unnecessary and the heavy milk content can be hard to digest. Too much pure fruit juice should be avoided as fructose (fruit sugar) can cause gastrointestinal distress. Carbonated beverages are OK only after they go flat. The important thing is to try out different "swim foods" on the longer training swims.

Solids should be avoided for many reasons. Waiting to finish chewing makes the feeding break too long and the swimmer cools off. Solids delay the emptying time of the stomach leading to nausea. A few hours into the swim, the intestines will also be having trouble digesting complex foods, leading to nausea.

Swim Organization:

The other important things a swimmer should be thinking about in the Spring are selecting a coach, a manager, 2-4 pacers, a First Aider, and recruiting large boats. Finding suitable large boats is difficult and the swimmer should start early.

Should relatives/lovers come on the big swim? There comes a point in almost every swim where the swimmer begs to come out. If the swimmer and relative both swear that they will respect the coach's and Swim Master's opinion that the swimmer can still be pushed, then it might be workable. It helps if the relative has a job to do on board a big boat.

Many swimmers add personal meaning to their swim by raising money for a charity. Larger charities can help more with organization and costs, but also expect more from the swimmer. It is important for the swimmer to advise the charity that the swimmer's success depends on good weather and that the date and time are subject to change.

Appendix 9

Advice For The Last Month

Once the “28 km” swim has been accomplished, the training focus shifts to maintaining conditioning and cold acclimatization, avoiding injuries, and to psychological preparation. Suggested joint injuring activities to avoid include: swims longer than 15 km; choppy waves and weedy swimming; contact sports; and water skiing. Getting enough rest and staying healthy is important. Organizing the swim and the pre-swim meeting in the last month help with picturing how things will work on the swim, but they also increase anxiety. Having a trustworthy manager to assist reduces the load. Relaxation exercises and positive self-talk (available from Dr Korzekwa) may also help.

The last 1-2 weeks is the time to gain weight, if necessary. Carbohydrate loading is *not* recommended. A 52 km swim in polluted water is very hard on the digestive system and any upset in the balance that has been achieved during training is to be avoided. Furthermore, carbohydrate loading only provides an advantage for 3-5 hours. Also, the strategy has been proven ineffective for female athletes. (If males want to try it, the carbohydrate-depletion portion of the diet should be dropped, as it is dangerous and not necessary. Only the carbohydrate loading component needs to be done for 3 days prior to the event.) The diet on the day of the swim should be very easy to digest: no fibre, low fat, and neither gas forming nor spicy. The last meal should be no closer than 3-4 hours before the swim. Sugar should be avoided in the last 2-3 hours as it causes insulin secretion, which causes glycogen breakdown and premature fatigue.

When preparing for the swim, the swimmer should be cautioned that they will be disqualified if caught ingesting banned substances (See Appendix 13). The Swim Master reserves the right to inspect all medications offered to the swimmer in order to enforce this rule. Use of medications not listed on the Medical Form and not pre-approved by the SSO Medical Officer may result in withdrawal of SSO sanction, or in termination of the swim.

What starting time should the swimmer plan for? This is a controversial topic. The answer depends to a large extent on the speed of the swimmer and the weather. Sometimes the weather for the weekend only allows one 21-24 hour “window,” so there is no choice. If the forecast is for wind, the swim will take longer. The average swimmer who completes the 16 km Trial Swim in around 5 hours will take about 18-22 hours to swim Lake Ontario. Once the test swim gets close to 6 hours, the Lake time will be 24 hours or more, which means a night period is guaranteed.

The pros and cons of starting at sunset (9 pm) are:

- Pros: Set up and start is in daylight (reducing confusion); the coldest part of the swim (due to air temperature) is over first; the most dangerous part (night) happens when the crew and swimmer are fresh; the ending (for the average swimmer) is in daylight; and, if the crew assembles right after work on Friday, they have the best chance of catching the weather window for the weekend;
- Cons: 9 pm is the end of the day and people are starting to tire; the swimmer has to have been able to nap; if the swim starts late or takes longer than 24 hours it runs into darkness again.

The pros and cons of starting at sunrise (6 to 7 am) are:

- Pros: The swim can take up to 38 to 39 hours with only one night period; the ending may be calmer at night (allowing for progress against wind);
- Cons: No one gets a good night’s sleep unless they can spend the night on Niagara-on-the-Lake; set up is in the dark; the coldest and most dangerous part of the swim is in the last 6-9 hours (21-24 hour swim) when the swimmer and crew are exhausted; and the finish is in the dark (causing confusion).

Most swimmers opt for a start at sunset and the swimmer spends the day in Niagara-on-the-Lake trying to nap.

Once the large boats have been confirmed, final equipment and crew organization can begin. If possible, the pre-swim meeting should be held. If the meeting cannot be held, the swimmer or manager needs to ascertain that the necessary equipment and items (Section 6) are on board. They also should enquire about the facilities on board to plan the menu, walkie-talkies, cellular phones, lighting system, number of crew, amount of gas, and room for extras (*e.g.* paddle board). The Swim Master should try to get Captain's Information Packages (available from SSO) to the boat captains.

Another important equipment consideration in the last month is the grease. People have experimented with automotive greases, but anhydrous lanolin is better for the skin; however, there have been recent concerns about toxins in lanoline (Wool fat) that have led to its reduced availability. The swimmer should insist on anhydrous lanoline, since hydrous lanoline is runny and does not stay on. Anhydrous lanolin sometimes cakes off but most of it remains, especially under the suit. Vaseline by itself tends to rub- or melt-off. Anhydrous lanolin may be blended with a little Vaseline, which also works well. The anhydrous lanolin usually needs to be ordered in advance through a pharmacist. Five to eight 500 g jars should suffice. For the big swim, packing the jars in a bag with 2 pairs of rubber gloves, a roll of paper towels and an old sheet for the swimmer to sit on in the car is helpful for clean-up. Swimmers may want to practice swimming with grease to get the feel of it. Especially important to remember is the facts that grease from the hands can smear goggles beyond repair and ruin the seal of goggles and cap.

In the last few weeks, the swimmer or manager has to contact the Toronto Port Authority, the Marine Division of Toronto Metropolitan Police and the Niagara-on-the-Lake Sailing Club. Rental or transport of SSO Zodiacs also needs to be arranged. Finally, the Boat Confirmation Form (see Appendix 19) should be submitted to the Swim Master at least 2 weeks before the swim.

Appendix 10

Lake Currents

A. Determinants of Lake Currents

Lake currents are caused either by wind or by water movement, such as rivers or streams. Wind currents are the dominant feature of surface circulation on the Great Lakes.

Currents are difficult to predict. Their speed and direction are dependent primarily upon the wind that creates them, as well as other factors, including depth and contour of the lake, the temperature difference between the air and the water, and the presence or absence of layers of water at different temperatures, known as thermoclines.

Depending upon what distance the wind has blown, surface currents will continue for some time after the wind has stopped. In addition, the distance over which the wind has blown, together with the velocity of the wind, will determine the height of waves.

B. General Pattern of Currents in Lake Ontario

Satellite data on winds and surface currents on the Great Lakes are now available on the internet:

<http://www.glerl.noaa.gov/res/glcfs/>

Surface currents in Lake Ontario generally travel counter-clockwise, see Figure 1. However, the patterns are sensitive to wind direction. If the wind blows in the same direction for a sufficient time, the surface layer of water responds to the wind by following in the same direction.

Within about five miles of the shoreline, both the wind and the current tend to move parallel to the shore. In general, the currents flow in one direction along the shore for about three to eight days, then reverse over a period of about a day, and then flow in the opposite direction along the shore for several days. One of these directions, depending upon which side of the lake, tends to be dominant due to the prevailing winds.

C. Lake Currents in the Niagara-Toronto Area

Mid-summer average wind speeds of 10 to 16 knots (12 to 18 mph) in the region between Niagara and Toronto cause expected surface lake currents as follows:

- Within about 3 miles of the Niagara shore, currents will likely move to the east at 0.3 to 0.6 knot (0.4 to 0.7 mph) with a maximum of 1 knot (1.15 mph or 1.9 km/h).
- Beyond about 3 miles, the current will become more northerly and weaker, until near the centre of the lake where the direction may be variable and the speed modest. The currents then reverse towards the west and strengthen.
- Within about 5 miles of the Toronto shore, currents will likely flow to the southwest at 0.3 to 0.6 knot (0.4 to 0.7 mph) with a maximum of 0.8 knot (1.0 mph). At least one day of strong winds from the north or northeast is usually required to reverse the above pattern.

D. Effect of Niagara River Current

The outflow of the Niagara River also influences lake currents. The outflow enters Lake Ontario at speeds of approximately 2 knots (2.3 mph or 3.7 km/h) and slows to about 0.4 knot (0.5 mph) approximately 3

miles offshore. Beyond that point, the lake current masks the river current. The river discharge is generally deflected eastward in response to the normal direction of the lake currents and the prevailing winds. It is usual to see large eddies, up to a mile wide, forming on the sides of the river current as it flows into the lake.

The current of the Niagara River will push the swimmer in a north-westerly direction. To gain the maximum advantage from this current, it is advantageous for the swimmer to be pushed slightly west of the straight-line course to Toronto. This manoeuvre can also provide a favourable position to manage any north-westerly winds or adverse currents from the Humber River. A skilled navigator will, however, adjust the swimmer's course to take account of winds and lake currents as they are presented during the swim.

E. Effect of Humber River Current

On the Toronto side, the dominant water entering the lake is the Humber River, the effect of which is to create a pattern of currents moving from the mouth of the river outwards and eastwards into the lake for about 5 miles, circulating towards the Toronto Islands, then reversing to flow westwards along the shoreline.

In addition, the eastward-flowing currents caused by the Humber River may interact with the usual pattern of southwest-flowing currents. Since it is at this point when the swimmer's energy levels often are at their weakest, it is prudent to take advantage of the predominate current and proceed to the nearest point of shore as soon as possible.

F. Lake Ontario Current Charts

General surface circulation on Lake Ontario is indicated in Figure 1 on the following page, while circulation depending upon wind direction is given in Figures 2 and 3.

The usual wind pattern at the western end of Lake Ontario is from the southwest. Thus, the surface current pattern to be expected is shown in Figure 3-B; however, the direction and intensity of the wind over the previous 24-48 hours would have a major influence on and could alter the direction of the currents.

In addition, heavy or prolonged rains swell rivers emptying into Lake Ontario and cause distortions in near-shore current patterns for days afterwards, *e.g.* the Humber River.

G. Swimming Lake Ontario North to South

Leaving Toronto Harbour is much more predictable and controllable at the start of a north-to-south swim and should have a much lower risk than the tired swimmer finishing in the Port of Toronto. The route out of the Harbour is more predictable and faster because of the greater speed of the swimmer. The swimmer and crew are fresh and alert. The start time can be adjusted to avoid busy times in the Harbour. A time can be booked with the Harbour Police in advance for an escort, if necessary.

However, it is highly recommended that only Zodiac drivers experienced with accompanying a swimmer accompany the swimmer out of the harbour. Also, there should be limited transferring between vessels until in the open lake to ensure harbour safety.

Coming into Niagara, the swimmer can avoid fighting the Niagara current by swimming into shore to the west of Port Weller. Typically, they land in Port Dalhousie. This distance is actually 49 km as opposed to 50.5 km going from south to north. So the hour longer from not getting the push from the Niagara River current is pretty much balanced-out by a shorter swim. The Niagara shore is typically not as busy as the Port of Toronto. Sometimes swimmers get pushed too far west and land in Beamsville or Jordan Harbour,

but these count as legitimate crossings. For a successful crossing, west winds that would blow the swimmer into the path of the Niagara current and over to the United States are to be avoided.

H. Summary

Lake currents are just one of many elements that must be considered when planning the strategy for a swim across Lake Ontario.

It is extremely difficult for swimmers to choose the optimal conditions for a swim since it requires the combination of many factors coming together at the same time. Such factors include availability of accompanying boats, availability of crew, availability of the Swim Master, low risk of thunderstorm/lightning activity, lack of heavy rains or winds up to 48 hours before the swim, no heavy winds forecast for the swim period, and sufficiently warm water temperatures.

LAKE ONTARIO CURRENTS

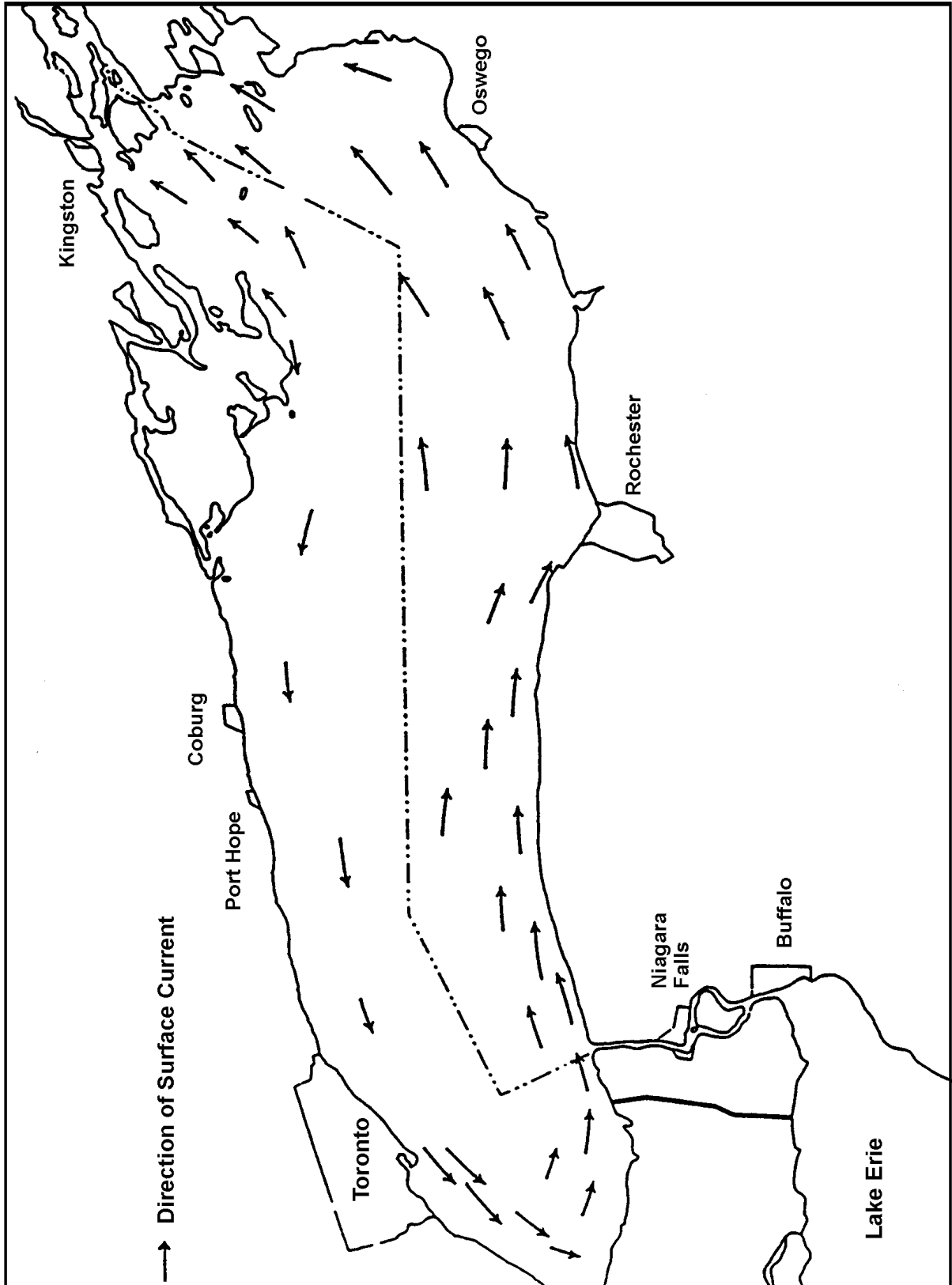


Figure 1. Summer Surface Circulation as inferred from drogoue and drift card observations, 1963-1967.

LAKE ONTARIO CURRENTS

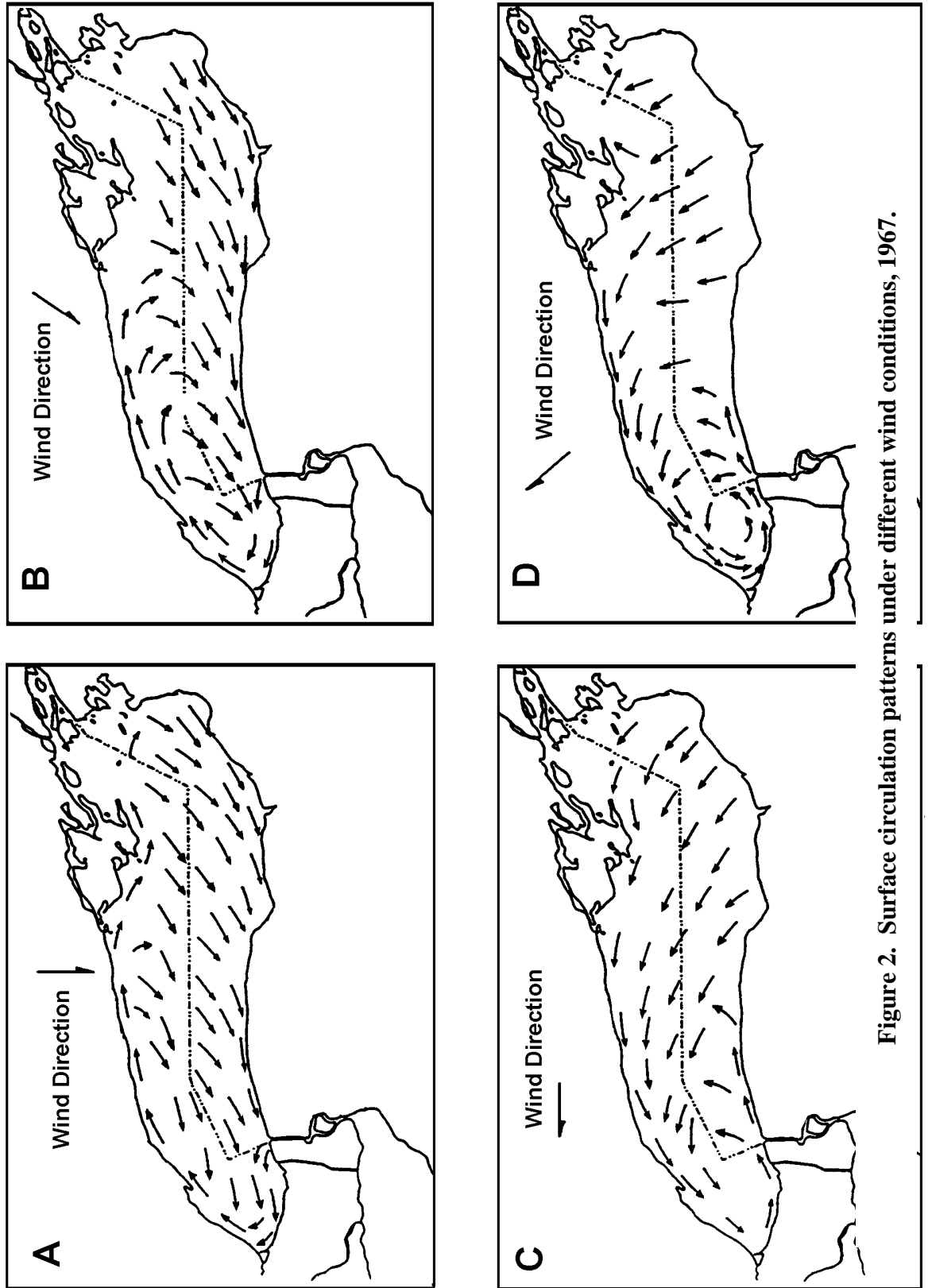


Figure 2. Surface circulation patterns under different wind conditions, 1967.

LAKE ONTARIO CURRENTS

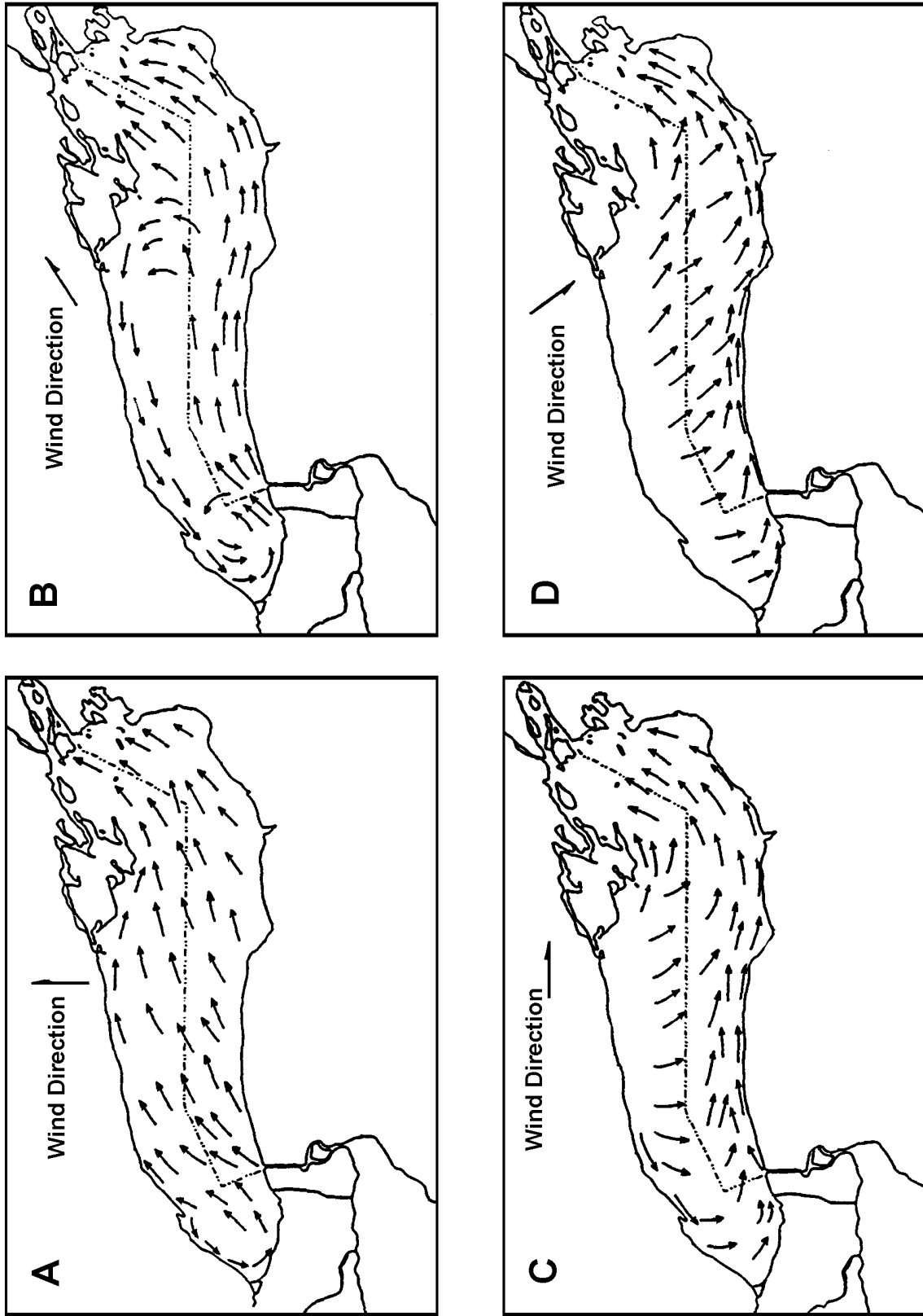
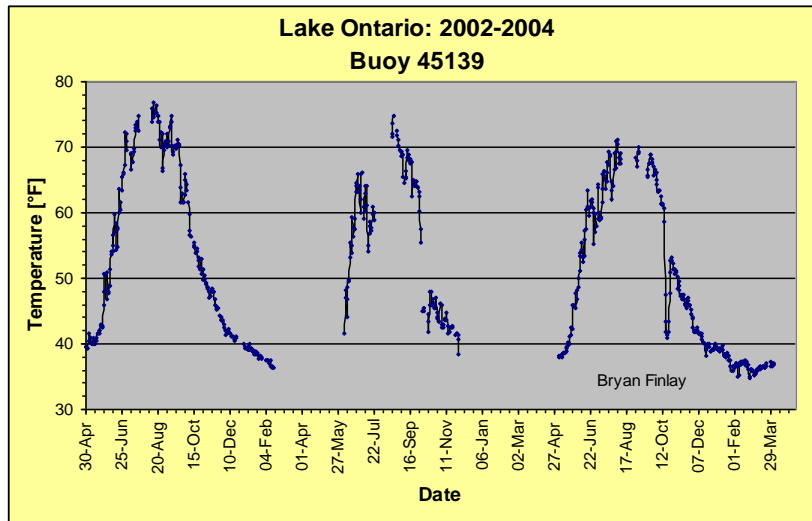


Figure 3. Surface circulation patterns under different wind conditions, 1967.

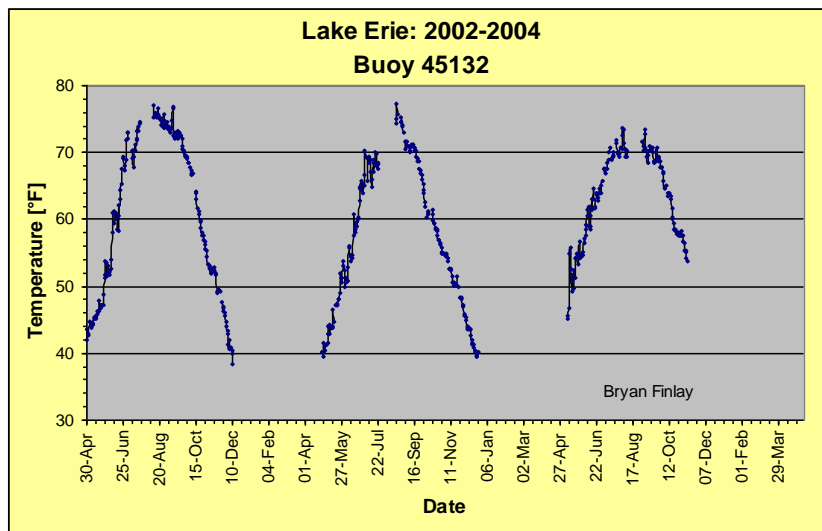
Appendix 11

Lake Surface Temperatures

The web site <http://www.ndbc.noaa.gov/maps/EastGL.shtml> has been used to collect satellite data on surface-water temperatures for Lakes Ontario and Erie, as displayed below:



The graph to the left represents the surface water-temperature at mid-day at the western end of Lake Ontario at marine buoy 45139 (Global position 43°23'60" N, 79°27'2" W). This buoy is located in mid-lake to the west of Toronto and, therefore, does not experience the dramatic, sudden drops in Summer-time water-temperature (Inversion) that characterize the behaviour of the deep water up to 5 miles south of Toronto after a few days of a strong north wind. The fluctuations in temperature, however, are still apparent and are significantly greater than anything seen in the relatively shallow waters of Lake Erie during the same periods of time. Data shown cover the period 2002-2004.



The data to the left are for the same period and relate to the marine buoy that is located about 5 miles south of Port Stanley on Lake Erie (Global position 42°28'60" N 81°13'60" W). The changes in temperature are seen to be far less erratic and reflect the shallower water in Lake Erie.

While the marine buoys do not transmit data year-long, the Internet links for daily data are:

Lake Ontario: http://www.ndbc.noaa.gov/station_page.php?station=45139

Lake Erie: http://www.ndbc.noaa.gov/station_page.php?station=45132

Use the following link to select other marine buoys: <http://www.ndbc.noaa.gov/maps/EastGL.shtml>

Links to maps of Surface Temperature which may be inaccurate under cloudy conditions:

Western Lake Ontario: <http://www.coastwatch.msu.edu/ontario/o1.html>

Eastern Lake Erie: <http://www.coastwatch.msu.edu/erie/e3.html>

Appendix 12

Nautical Miles

1 statute (land) mile = 5,280 feet = 1,609 metres = 0.868 nautical mile

1 nautical mile = 6,080 feet = 1,852 metres = 1.151 statute mile

Appendix 13

Banned Substances

The following are examples of classes and Methods prohibited in sport:

Classes	<p>Stimulants eg. amphetamine, bromantan, caffeine (above 12 µg/mL), carphedon, cocaine, Ephedrine, certain beta 2 agonists.</p> <p>Narcotics eg. diamorphine (heroin), morphine, methadone, pethidine.</p> <p>Anabolic Agents eg. methandienone, nandrolone, stanozolol, testosterone, clenbuterol, DHEA, androstenedione.</p> <p>Diuretics eg. acetazolamide, frusemide, hydrochlorothiazide, triamterene, mannitol.</p> <p>Peptide & Glycoprotein Hormones & Analogues eg. growth hormone, corticotrophin, chorionic gonadotrophin, erythropoietin, and all respective releasing factors and their analogues.</p>
Methods	<p>Blood Doping</p> <p>Pharmacological, Chemical & Physical Manipulation eg. substances and methods that alter the integrity and validity of the urine; eg. probenecid, catheterisation, urine substitution.</p>
Classes of drugs subject to certain restrictions	<p>Alcohol & Marijuana Restricted in certain sports. Refer to regulations of national or international sports federations.</p> <p>Local Anaesthetics Route of administration restricted to local or intra-articular injection*.</p> <p>Corticosteroids Route of administration restricted to topical, inhalation*, local or intra-articular injection*.</p> <p>Beta-blockers Restricted in certain sport. Refer to regulations of national or international sports federations.</p>

*** Written notification of administration should be given to relevant medical authority, eg. governing body medical officer, except for dental application of local anaesthetics.**

Treatment Guidelines

Examples of permitted & prohibited substances

	ALLOWED	BANNED
ASTHMA	sodium cromoglycate, theophylline, salbutamol*, terbutaline*, salmeterol*, beclomethasone*, fluticasone*, (* by inhalation only & written notification of administration should be given to relevant medical authority).	products containing sympathomimetics eg. ephedrine, isoprenaline, fenoterol, Rimiterol, orciprenaline.
COLD/ COUGH	all antibiotics, steam & menthol inhalations, permitted antihistamines, terfenadine, astemizole, pholcodine, guaiphenesin, dextromethorphan, paracetamol.	products containing sympathomimetics eg. ephedrine, pseudoephedrine, phenylpropanolamine.
DIARRHOEA	diphenoxylate, loperamide, products containing electrolytes eg. Dioralyte, Rehidrat).	products containing opioids eg. morphine.
HAYFEVER	antihistamines, nasal sprays containing a corticosteroid or Xylometazoline, eyedrops containing sodium cromoglycate.	products containing ephedrine, pseudoephedrine.
PAIN	aspirin, codeine, dihydrocodeine, ibuprofen, paracetamol, all non-steroidal anti-inflammatories, dextropropoxyphene.	products containing opioids, caffeine.
VOMITING	domperidone, metaclopramide.	

The most recent list can be found at: <https://www.wada-ama.org/>

Appendix 14

The SSO Certificate of Completion



SOLO SWIMS
O F O N T A R I O

S A M P L E

hereby certifies that
on August ?? 201?

Another Swimmer

swam Lake Ontario

S A M P L E

from Niagara-on-the-Lake
to Leslie Street Spit, Ontario

a distance of 45 kilometres
in ?? hours ?? minutes ?? seconds

S A M P L E

PRESIDENT

VICE-PRESIDENT

REGISTRATION NO. ??

Appendix 15

Standards for the Swim Master

1. Marathon swimmers, coaches or others with related experience are eligible to become a **Swim Master**.
2. The **Swim Master** is an authorized representative of SSO and must meet stringent requirements before being certified. The SSO Board of Directors is responsible for the ratification of an SSO member as a **Swim Master**.
3. **Swim Master** candidates must serve an apprenticeship involving acting as an **Assistant Swim Master** at two-or-more marathon swims at the discretion of the supervising **Swim Masters** and/or the SSO Board. At the end of the apprenticeship, the supervising **Swim Masters** will each submit a report to the Board with a recommendation concerning ratification of the apprentice as a **Swim Master**. Candidates will be judged on the following criteria:
 - Attendance at a Swim Master Workshop,
 - Letters of recommendation from two different supervising Swim Masters,
 - Leadership abilities,
 - Swimming and rescue ability*,
 - Knowledge of boat safety,
 - A written Swim Master quiz is used to ensure adequacy of the candidate's knowledge,
 - Driving experience and ability to handle an inflatable boat (Zodiac) with a swimmer,
 - Obtained a Pleasure Craft Operator's Card,
 - First aid and CPR training **

* Candidates without lifeguard qualifications (minimum Bronze Cross) are given *ratification with restrictions*, namely that they must always work with a qualified lifeguard who should always be by the swimmer's side.

** Those candidates without recognized First Aid and CPR qualifications are given *ratification with restrictions*, namely that they must always work with a person with these medical qualifications who should generally be stationed on the evacuation boat.
4. In addition, completion of a Power Squadron Course and a Radio Operation License are considered an optional asset.

Risk Management, SSO.
Created: 15th December 1998
Last Updated: 18th January 2009

Appendix 16

Lake Ontario Outcomes and Associated Trial-Swim Times

This is a detailed analysis of all the completed and non-completed swims across Lake Ontario where trial swim data were available for comparison. Times were prorated for a 16 km Trial Swim and a 50.5 km Lake Ontario swim.

Name	Prorated Trial Swim Time for 16 km		Conditions	Prorated Lake Ont. time for 50.5 km		Lake Ontario Conditions
	hh:mm:ss	Hours (decimal)				
Arsenault, Christine	5:38	5.63	70-76°F; 0-1 ft	22:22	22.37	
Arsenault, Trinity	6:07:20	6.12	Lake Erie, 71-75, mostly flat – 10 cm	23:19	23.32	Very high waves and thunder at the end
Beacham, Ashleigh	5:01:55	5.03	Ripple, 74°F	18:22	18.37	
Boscariol, Rebekah (2011)	5:24:56	5.42	Waves 1-5; 68-72°F	15:33	15.55	Waves 2-3ft x 3 h, 1-2 x 6h, 70-74°F
Brannagan, Melissa	4:47	4.78	Choppy	16:11	16.18	2-3 ft x 2hrs
Carr, Annaleise	5:46	5.77		26:40	26.67	61-70°F, 1-3 ft
Chisholm, Shaun	4:40	4.67		19:23	19.38	1-3 ft
Freedman, Shelagh	5:29:45	5.48	Gulliver's, 74°F	26:03	26.05	
Goodwin, Rick	6:46	6.77		29:26	29.43	Hospital for 3 Days
Hermans, Stephanie	4:42	4.7	56-57°F, 0- 0.5	18:05	18.1	
Keith, Vicki (N to S in 1986)	5:32	5.54	43.07 mi in pool/24h (1990)	29:53	29.88	
King, Loren	5:13:36	5.23		18:35	18.58	
Korzekwa, Marilyn	5:00	5.00	Gulliver's	23:21	23.35	
Lumsdon, Kim (2013)	6:39	6.65		26:38 (2006)	26.63	Brief Hospital
McIsaac, Michael	5:37	5.62		21:44	21.74	
Middleton, Kim (1985)	5:30 (1994)	5.5	Lake Ontario	18:34 (1985)	18.57	
Middleton (N to S in 1993)	6:08	6.13	Lake Couchiching	29:35	29.58	
Pinto, Paulo	5:21	5.35		23:57	23.95	
Robinson, Susanne	6:49	6.82		26:30	26.5	
Scognamillo, Jade	4:42	4.7		19:59:49	19.98	
Scott, John, 1992	3:48	3.8		14:50	14.83	
Serdula, Jay	7:34	7.57		44:30	44.5	Hospital 2½ days
Shields, Colleen (1990)	5:22	5.37		21:08	21.13	
Shields (2006)	5:00	5.0	Severn R	16:30	16.5	
Shields (2014)	5:56	5.95		21:33	21.55	
Taylor, Gregg	5:04	5.07		19:23	19.38	
Thompson, Patty	5:15	5.25	Outdoor pool, 69°F	20:58	20.97	
Vadillo, Miguel	5:04	5.07		18:03	18.05	
Whiteside, Sam	4:37	4.62		15:11	15.18	
Wood, Rick	5:57	5.95		21:33	21.55	

DID NOT FINISH	16 km time		Conditions	Estimated Lake O 50.5 km time		Conditions	D N F
	Time	Speed		Time	Speed		
Boscariol (2014)	5:17:23	5.38	64°F, swells	15:57	15.95	Water 48°F, Hypothermia	2
Buehlow, Alex	4:54	4.9	Lake O, swells 1-1.5 ft., 70-72°F	15:52	15.86	60°F, Hypothermia, hospital	1
Lambert, Natalie	4:48	4.8	Ripple	17:46	17.76	Thunder 42.5k in 14:57	2
Lumsdon, Kim (2013)	6:39	6.65	Lake Ontario, Toronto harbour	23:27	23.45	Hospital x 18 hrs, Black clouds, high waves	2
Lussier, Brenda	7:30	7.5	Lake Erie	33:14	33.23	Hospital x 34 h	1
Shields, Colleen (2005 tandem)	4:47	4.78	At Akomak	19:34	19.57	Vomiting	1
Shields (2009)	4:56	4.34		20:36	20.6	Injury	1
Shields (2010)	5:03	5.04		20:36	20.6	Huge W waves & wind	2
Shields (2012)	6:16	6.27	Waves, pulled ribs	17:58	17.97	Waves	1
Willoughby, Greg	5:14	5.23	Lake Erie	25:18	25.3	65°F, hypothermia, hospital x 4 days	1

Trial swim colour codes

Pink = less than 5 hours

Green = 5 to 6 hours

Yellow = over 6 hours

DNF code

1 = swimmer factors (fatigue, nausea, pain, hypothermia)

2 = extreme weather (including water temp. below 60°F)

Hospital = staying longer than a warm-up and check over, i.e.) more than 8 hours.

Hospital admissions are generally for breathing issues, dehydration, electrolyte imbalances or rhabdomyolysis (a condition in which muscle breakdown products, such as the protein myoglobin, are harmful to the kidneys and may lead to kidney failure.)

Pearson correlation between trial swim time and Lake Ontario time is very high at 0.77, $p = 1.7 \times 10^{-7}$

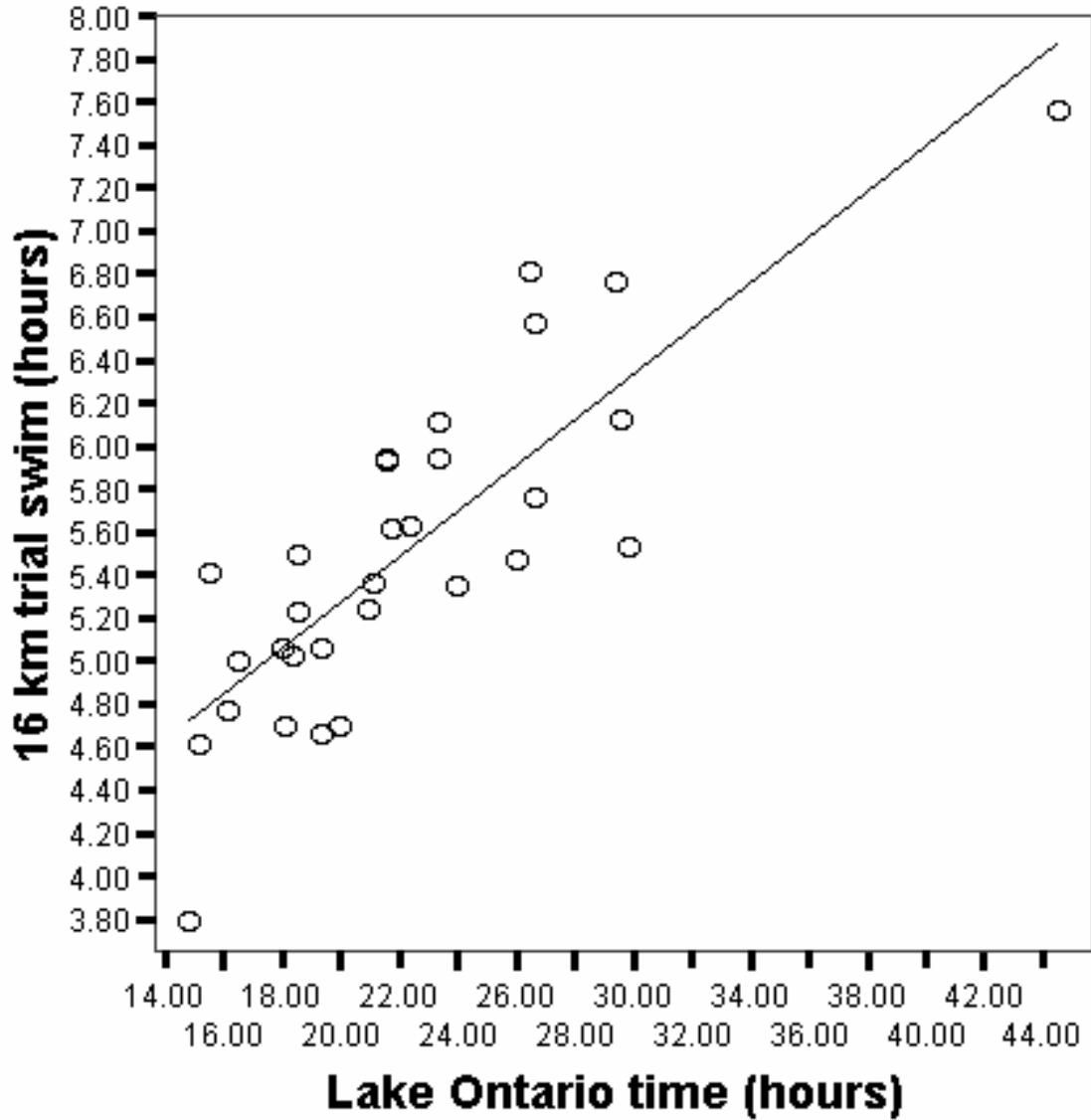
Conclusions: Swimmers whose trial swim was over 6 hours took 23 hours or longer to complete Lake Ontario. None of the completers who swam the trial in under 6 hours ended up staying in hospital. Three out of 4 who swam the trial in over 6 hours 30 min ended up in hospital for over 8 hours.

The data for people who did not complete the Lake Ontario swim was complicated by extreme weather factors and 2 cases of hypothermia in fast swimmers. However, the 2 who did the trial in over 6 h 30 min ended up admitted to hospital.

The two swimmers (one completed, one didn't) who did the trial swim in 7h 30min went backwards in the Humber River current and had lengthy hospitalizations.

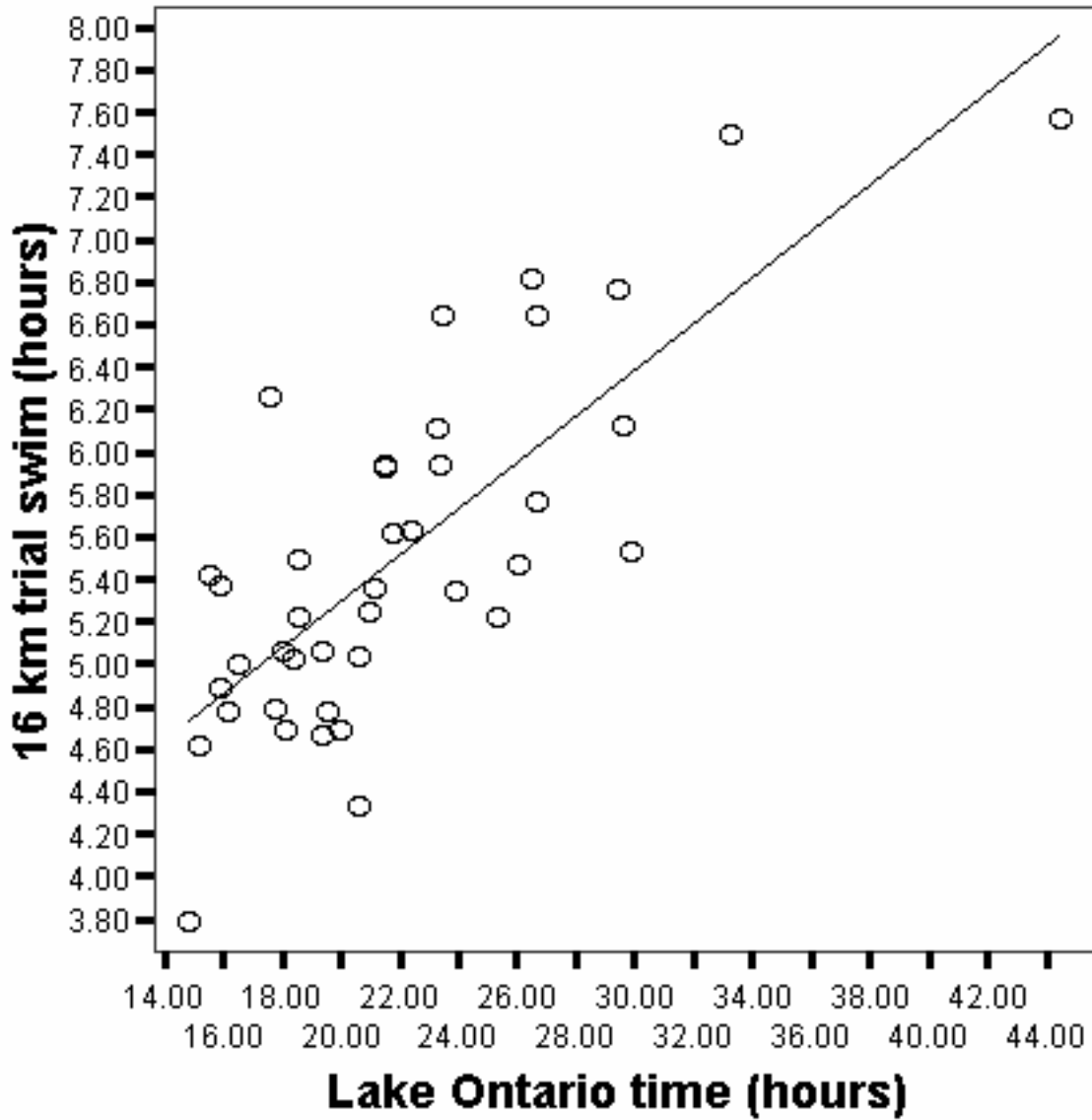
Trial-Swim Completers

16 km trial swim (hours) = 3.15 + 0.11 * lake_o
R-Square = 0.68



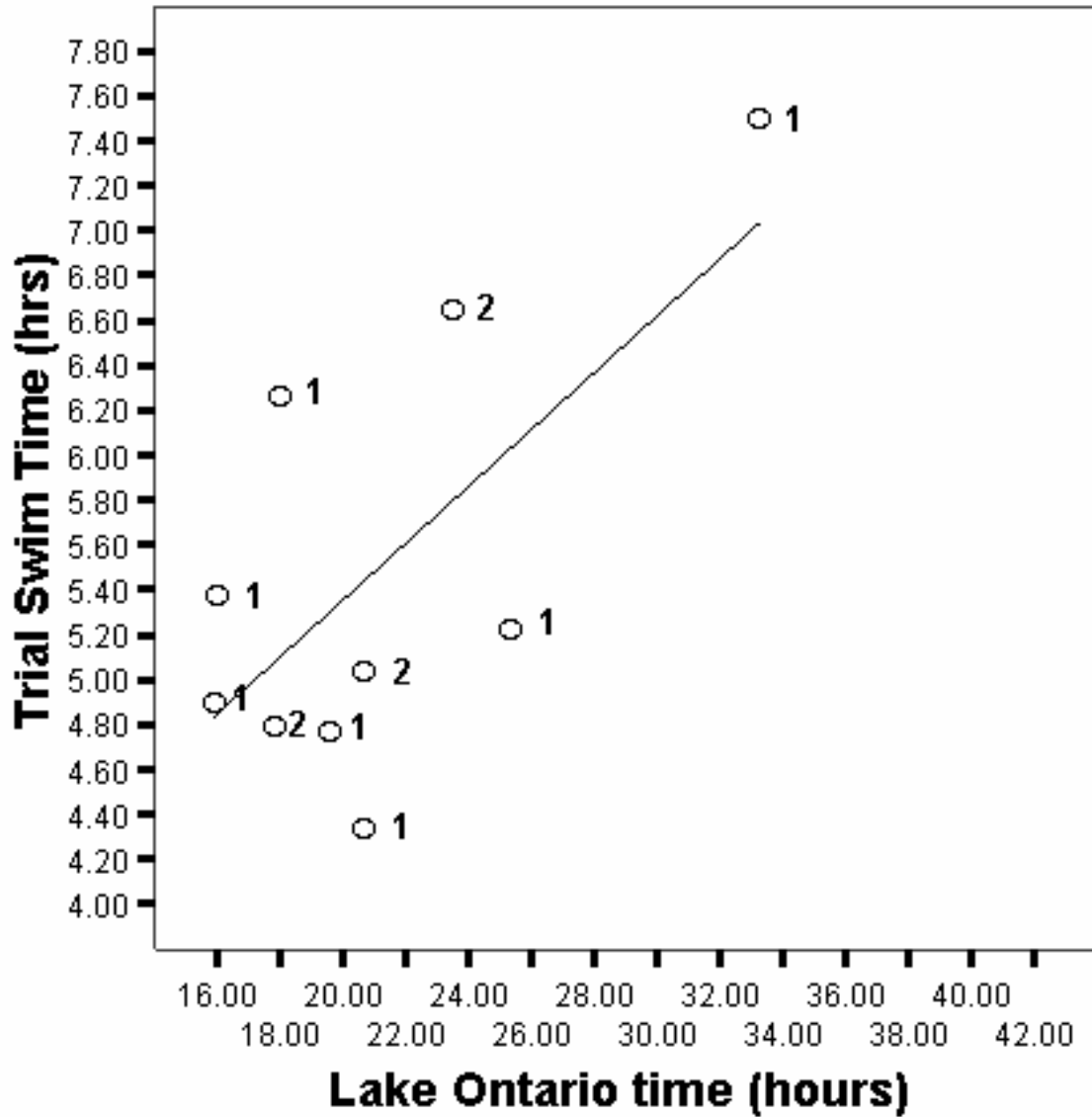
Lake Ontario Completers and Non-Completers (more than half way)

16 km trial swim (hours) = 3.12 + 0.11 * lake_o
R-Square = 0.59



Non-completers (swam at least halfway)

Trial Swim Time (hrs) = 2.82 + 0.13 * lake_o
R-Square = 0.45



Relationship between Trial Swim and Lake Ontario crossing times

Based on the data available, as of 2017, for *completed* Lake Ontario swims, where Trial Swim data were available for comparison, the following Table establishes estimates for relating a 16 km Trial Swim to a 50.5 km Lake Ontario swim.

The relationship, with N=30, is approximately 4.0x, with a statistical range (± 1 SD) from 3.4x to 4.7x.

Name	Prorated Trial Swim Time for 16 km		Prorated Lake Ont. time for 50.5 km		Ratio <u>Lake Ont</u> Trial	Explanation for outliers
	hh:mm:ss	Hours (decimal)	hh:mm:ss	Hours (decimal)		
Arsenault, Christine	5:38	5.63	22:22	22.37	3.97	
Arsenault, Trinity	6:07:20	6.12	23:19	23.32	3.81	
Beacham, Ashleigh	5:01:55	5.03	18:22	18.37	3.65	
Boscariol, Rebekah (2011)	5:24:56	5.42	15:33	15.55	2.87	Trial – Waves
Brannagan, Melissa	4:47	4.78	16:11	16.18	3.38	
Carr, Annaleise	5:46	5.77	26:40	26.67	4.62	LO - Some waves
Chisholm, Shaun	4:40	4.67	19:23	19.38	4.13	
Freedman, Shelagh	5:29:45	5.48	26:03	26.05	4.75	Trial in Gulliver's
Goodwin, Rick	6:46	6.77	29:26	29.43	4.35	
Hermans, Stephanie	4:42	4.7	18:05	18.10	3.98	
Keith, Vicki (N to S in 1986)	5:32	5.54	29:53	29.88	5.39	No Niagara push
King, Loren	5:13:36	5.23	18:35	18.58	3.55	
Korzekwa, Marilyn	5:00	5.00	23:21	23.35	4.67	
Lumsdon, Kim (2013)	6:39	6.65	26:38 (2006)	26.63	4.00	
McIsaac, Michael	5:37	5.62	21:44	21.74	3.87	
Middleton, Kim (1985) (1994)	5:30	5.50	18:34 (1985)	18.57	3.38	
Middleton (N to S in 1993)	6:08	6.13	29:35	29.58	4.83	No Niagara push
Pinto, Paulo	5:21	5.35	23:57	23.95	4.48	
Robinson, Susanne	6:49	6.82	26:30	26.5	3.89	
Scognamillo, Jade	4:42	4.70	19:59:49	19.98	4.25	
Scott, John, 1992	3:48	3.80	14:50	14.83	3.90	
Serdula, Jay	7:34	7.57	44:30	44.50	5.88	Backwards in Humber current
Shields, Colleen (1990)	5:22	5.37	21:08	21.13	3.93	
Shields (2006)	5:00	5.00	16:30	16.5	3.30	? fast swimmer
Shields (2014)	5:56	5.95	21:33	21.55	3.62	
Taylor, Gregg	5:04	5.07	19:23	19.38	3.82	
Thompson, Patty	5:15	5.25	20:58	20.97	3.99	
Vadillo, Miguel	5:04	5.07	18:03	18.05	3.56	
Whiteside, Sam	4:37	4.62	15:11	15.18	3.29	? fast swimmer
Wood, Rick	5:57	5.95	21:33	21.55	3.62	
					AVG \pm 1SD	4.024 \pm 0.641
Pink <3.38 Green 3.38 to 4.67 (AVG \pm 1 SD) Yellow >4.67					Range	3.38 - 4.67



Appendix 17

Pre-Trial-Swim Training Log

Date	Location [GPS data if relevant]	Distance Swum [km]	Duration [hh:mm]	Temperatures Water & Air [°C]	Waves* Height & Direction	Comments [e.g. Night, Winds, Feeding, Condition at end of swim]	Signature of Observer

* Estimates:

Wave Height in metres trough-to-crest.

Wave Direction relative to the swimmer, e.g. Head-on, Angle from head-on left or right, Broadside, Following.



Appendix 18

Pre-Swim Checklist for ALL Pacers

Name of Swimmer Being Paced: _____.

Pacer's Name	Age Pacer will be on date of swim	Water-Safety Qualifications	Longest Open-Water Swim	Experience in Waves	Cold Water Experience	Pre-Swim pacing with this swimmer	Serious Medical Conditions
		<i>Bronze, NLS, etc.</i>	<i>km and hh:mm</i>	<i>Metres</i>	<i>Temp [°C] and Time [hh:mm]</i>	<i>Hours</i>	<i>High or low blood-pressure or heart rate, diabetes, epilepsy, amputee, etc.</i>

Appendix 19

Boat & Crew Confirmation Form – Part 1

1. Boats: For a swim on a Great Lake, two boats of at least 30 feet in length are recommended. The final decision on the suitability and approval of all craft is at the discretion of the Swim Master.

	----- Boat #1 -----	----- Boat #2 -----
Name:	_____	_____.
Call Letters:	_____	_____.
Size:	_____	_____.
Mode of Propulsion:	_____	_____.
Top Speed:	_____	_____.
Navigational System:	_____	_____.
Owner:	_____	_____.
Owner Phone:	_____	_____.
Owner e-mail:	_____	_____.

2. Medical Personnel: _____.

Note 1: Part 1 of the Boat & Crew Confirmation Form must be submitted to Solo Swims of Ontario in order for the swim to be sanctioned. It should be received FOUR weeks before the swim, but AT LEAST TWO weeks before, otherwise the swim may be cancelled.

Note 2: The Boat & Crew Confirmation Forms can be sent to either the SSO Secretary or to the assigned Swim Master.

Part 2 of the Boat & Crew Confirmation Form:

- Part 2 must be received by the SSO Secretary or the Swim Master so that it can be reviewed prior to the start of the swim.
- While Part 2 may be presented to the Swim Master at the start of the swim, it would be impossible for SSO's Medical Officer to review any designated medical conditions at that time. Any such late presentation that involved details of Medical Conditions would make it impossible for the Swim Master to approve starting of the swim.
- All Boat Operators must have their Boat Operator Cards to show to the Swim Master at the start of the swim.
- The Swim Master may employ Part 2 of the form for a safety Roll Call at any time during the swim.
- Make extra copies of Part 2, as necessary, to cover all of the boat operators, crew and pacers.

Appendix 19

Boat & Crew Confirmation Form – Part 2

Name	Boat Operator Y/N	Boat Operator Card Y/N	Pacer Y/N (Age)	Other Crew Y/N	Medical Conditions Y/N	Attached Medical Details Y/N

Failure to provide accurate or true information can invalidate insurance coverage for the swim and/or prevent SSO from ratifying the swim.

Pacer Age is taken on the earliest date of involvement – the Qualifying Swim or the Main Swim.

Medical Conditions:

- Boat Operator includes any power boats, sailboats, inflatables or other craft involved with the swims (Qualifying Swim or Main Swim).
- Relevant medical conditions involve any feature that would impact on the individual’s ability to provide support for the swimmer for up to 24 hours without proper rest.
- Heart conditions and previous strokes are relevant.
- Suspension of a driving licence due to medical conditions would obviously be inappropriate for a boat captain on such a marathon swimming venture.
- If you answer “Y” for yes to Medical Conditions, please detail the conditions on a separate sheet and SSO’s Medical Officer will investigate the details, as necessary, before SSO will consider providing sanction for the swim.

Appendix 20

Toronto Port Authority

Application & Waivers

APPLICATION FOR AUTHORIZATION OF AN EVENT / ACTIVITY

and

**WAIVER OF CLAIMS
FOR GRANTING OF PERMISSION**

and

**WATER-RELATED PERMISSION
CONDITIONS, WAIVER AND INDEMNITY**

Swimmer's Responsibilities in Obtaining Approval from the Toronto Port Authority

The Toronto Port Authority (TPA) requires the following items from the swimmer in order for the TPA to consider authorization for the swim to enter their area of control that covers the Toronto waterfront and Leslie Street Spit:

- A Cover Letter outlining the swimmer's request.
- Completion of the 3 TPA forms: "Application for authorization of an event/activity"; "Waiver of claims for granting permission", and "Water-related permission: Conditions, waiver and indemnity", as provided in this Appendix 20.
 - Note that these forms must be completed by a person who is 18 years of age or older. In the event that the swimmer is not 18, then the form must be signed by the parent or guardian of the swimmer.
- A separate sheet (Waiver Form) MUST list EVERYONE taking part in the event, either in the water or in a boat. Each name must be signed and witnessed. The Waiver Forms are not complete unless each waiver is witnessed.

The SSO Secretary supplies the following information to the TPA:

- A copy of the SSO Liability Insurance certificate naming the "Toronto Port Authority and Her Majesty in Right of Canada" as additional insureds. The SSO Secretary provides these insurance details annually to the TPA, along with a listing of SSO-approved swimmers for the season and associated swim-dates.
- A Safety Plan.
 - The Safety Plan will involve registration with Solo Swims of Ontario.
 - The presence of an SSO-approved Swim Master.
 - Adherence with the requirements of the SSORI package.
- SSO is a registered charity; consequently, as of 2008, no fees are required with the TPA application.
 - The charity registration number for SSO is 88097 4134 RR0001.

Note: The swimmer should anticipate there may have been changes at the TPA since the compilation of this version of the SSORI and that these forms and requirements may have changed.

Consequently, early application to the TPA is advised to ensure that all permissions are granted in sufficient time to allow the swim to take place.

Once approved, and an Authorization signed, the TPA will also notify the Toronto Police Services Marine Unit, and a Notice to Mariners to cover the portion of the event in Toronto Harbour.

The current contact for this information and address for submitting an application is:

Helen Oel
Assistant to the Harbour Master and Deputy Harbour Master
The Toronto Port Authority
60 Harbour Street
Toronto ON M5J 1B7
Canada

e-mail: HOel@portstoronto.com
Tel: 416-462-3937
FAX: 416-462-1612

Processing of a complete application, after TPA's receipt of the application and waiver forms will take approximately two weeks or longer if statutory holidays are involved.

Guidelines for Completing the TPA Forms

Application for Authorization Of An Event / Activity

- Name of Applicant: Enter the Swim Master's name and then the swimmer's name
- Event / Activity Date/s & Time/s: Enter the Dates and times
- Event / Activity Location: Enter "Marilyn Bell Park, Toronto, ON"
- Swim Master signs the bottom right hand on the line above authorized signature of Group/Organization with their home address

Wavier of Claims For Granting of Permission

- Undersigned: Enter the name: of the swimmer on the first line
- On behalf of: Enter "(Swim Master's name) – SSO Swim Master" on the second line.
- In consideration for . . . : Enter "To enter the Toronto Waterfront as part of my swim across Lake Ontario" on the third line.
- On or about (date): Enter the date
- Enter the date where it says, "in witness whereof"
- Then have a "witness" sign the left side, AND the swimmer sign the right side where it says "signed"

Water-Related Permission: Conditions, Waiver and Indemnity

- Write the swimmer's name.
- 2nd line on behalf of Solo Swims of Ontario.
- Then enter the date range under "period of permission" make sure you write a wide range of dates for weather conditions.
- Date it where "signed this" appears.
- Then have a "witness" sign the left side and the swimmer "sign" the right side where it says applicant.



APPLICATION FOR AUTHORIZATION OF AN EVENT

Application No:	Ref: Harbour Master Office
Account No: (40410-110)	Tel. (416) 462-3937
Dated:	Fax (416) 462-1612
	Email: HOel@portstoronto.com

THIS APPLICATION is for authorization to conduct an Event / Activity in the waters in the jurisdiction of the Toronto Port Authority

Name of Applicant: _____

Event / Activity Date/s: _____ Time/s: _____

Event / Activity Location: _____

Description of any Special Requirements: (please attach Safety Plan and Diagram if placing markers)

(add separate sheet if necessary)

The provision of false or misleading information will result in authorization being withdrawn by TPA.

THIS APPLICATION form, duly completed, must be returned to the Harbour Master’s office for review, together with Administration Fee as stated (payable to the Toronto Port Authority) and signed Waiver of Claims form, prior to any Permission Permit granted.

___ **Proof of adequate and specific liability insurance coverage with the “TORONTO PORT AUTHORITY AND HER MAJESTY IN RIGHT OF CANADA” added as an Additional Insured, must be provided prior to the event in question. Insurance also to include a Cross Liability clause and a Severability of Interest clause. Wreck Removal may be required as necessary. The applicant will notify the TPA in the event that the policy is amended or cancelled.**

___ Safety Plan attached.

**Authorized Signature of Group/Organization
 (if not a legal entity, Signature of individual/s
 assuming personal responsibility)**

Print Name and Address:

Tel. _____ **Fax** _____
E-Mail _____

(GST Reg. No. 108122458RT)

*Note: Fee waived if Registered Charity.
 Charity Reg. No. (if applicable):
 SSO Charity No. 88097 4134 RR0001*



WAIVER OF CLAIMS
FOR GRANTING OF PERMISSION

KNOW ALL MEN BY THESE PRESENT

That the undersigned:

on behalf of:

in consideration for the Toronto Port Authority permitting me/us to:

on or about (date):

_____.

I/we undertake to comply with all regulations and requirements of the Toronto Port Authority and I/we hereby expressly agree to indemnify and hold harmless the Toronto Port Authority and Her Majesty in Right of Canada, their employees, directors, officers, servants or agents, all suits, actions, claims, costs or demands (including without limitation, suits, actions, claims, costs or demands for death, personal injury and property damage) arising or resulting directly or indirectly from the permitted act.

The undersigned hereby waives any and all claims which, but for this waiver, I/we may have, or may hereafter acquire, against the Toronto Port Authority and her Majesty in Right of Canada arising out of the granting of permission above described.

Furthermore, in consideration for granting of such permission by the Toronto Port Authority, I /we agree to promptly pay any damages, costs or charges incurred.

IN WITNESS WHEREOF, this waiver has been duly executed at Toronto, Ontario, this _____ day of _____, _____.

WITNESS:

SIGNED:

FAX BACK TO: 416-462-1612

Or

EMAIL TO: HOel@porttoronto.com - and - mriehl@porttoronto.com

TORONTO PORT AUTHORITY

WATER-RELATED PERMISSION

CONDITIONS, WAIVER AND INDEMNIFY

I, the undersigned: _____

on behalf of (Company Name and Address) _____

in consideration for the Toronto Port Authority permitting me to enter the waters of Toronto Harbour for the purpose of filming/photography or swimming (or other special and specific purpose) understand and agree to the following conditions

1. Compliance with Regulations

We, the Company, undertake to comply with all Operating Regulations and Practices and Procedures as laid down by the Toronto Port Authority.

2. Inform Toronto Police Marine Unit

Before entering the water, we, the Company, will report to the Toronto Police Marine Unit (telephone 416-808-5800) to provide them with the location and times of water-related activities. It is understood this permission is null and void through failure to give such prior notice.

3. Produce Proof of Permission

Notwithstanding prior notice to the Toronto Police Marine Unit, the Company agrees to keep this properly-executed form available at the location, and to promptly produce it for inspection at the request of a police officer or an officer of the Toronto Port Authority. It is understood the failure to produce a valid permission form on request may be construed as absence of authorized permission, and if requested to do so, the Company will immediately discontinue the described activities until a valid form is produced, or face penalty under law.

4. Act at Own Risk and Waive Claims

We, the Company, acknowledge that we enter the water and engage in accepted water-related filming activity at our sole risk of injury or death or damage to the signee and any and all persons employed by the Company, or to other persons or property, and hereby agree to indemnify and hold harmless The Toronto Port Authority and Her Majesty in Right of Canada, their employees, servants or agents, against all suits, actions, claims, costs or demands of any nature arising or resulting directly or indirectly from the granting of this permission.

5. Period of Permission

It is understood this permission is granted for the period from _____ to _____ only, following which further permission must be obtained if necessary in order to be valid. Permission may be revoked at any time without prior notice upon breach of these conditions and undertakings.

I solemnly state:

- (a) that I have read and understand the foregoing upon the reverse
- (b) that I am 18 years of age or older
- (c) that, on behalf of the Company and myself, I waive any and all claims which but for this waiver I may have or the Company may have or hereafter acquire against the Toronto Port Authority, their employees, servants or agents, arising out of the granting of this permission, and this waiver shall be binding upon my heirs, executors, administrators and assigns.

Signed this _____ day of _____, 2_____.

**Witnessed by: _____ Signed by: _____
Applicant**

Permission to conduct water-related activities is granted subject to the foregoing undertakings and conditions.

**Signed _____
Harbour Master**

Date _____

NOTE: Permission is not granted unless this form is signed by an authorized representative of the Company and the Harbour Master or his designated representative.

FAX TO: 416-462-1612 for authorization and return. Be sure to include a return fax number.

OR

EMAIL TO: HOel@porttoronto.com - and - mriehl@porttoronto.com

**Listing of All Support Crew
(Pacers, boat owners, coach, observers, etc.)**

Each signatory below confirms that he or she has read and agrees to comply with the requirements of the preceding “Toronto Port Authority. Water-Related Permission. Conditions, Waiver and Indemnify” form.

Name - Purpose	Age if <18	Signature	Witness

These forms, along with the Insurance Waiver Forms (Appendix 3) are to be carried during the swim by the Manager of the swim (or their designate) and must be available for inspection upon request by the Toronto Harbour Police.

REVISION HISTORY

Date	Changes
29 Apr 2005	New release
13 Jun 2006 Rev 02	<ul style="list-style-type: none"> • Added Revision History and renumbered the sections. • Added changes to reflect SSO may or may not have equipment for rental. • Equipment list in Section 5. Added “safety equipment, as required by the coast guard”. • Removed reference to the Toronto-Rochester hydrofoil which no longer exists. • Updated the list of contacts for Public Relations, adding e-mail and FAX numbers where possible. • Added new Appendix 2 related to Registration and Insurance. Other Appendices updated as necessary. • Added SSO’s charity registration number to the TPA “Application for Authorization”, and updated Appendix 5 appropriately. • Updated “Swimmer’s Fees”, Appendix 6, and Appendices 7 and 8 to reflect motions by the SSO Board on 30 Jan 2006, 10 Apr 2006 and 5 Jun 2006. Registration fee changed to \$750, \$1,000 or \$1,250. 40¢ mileage allowance. \$60 per diem meal allowance. • Suspended equipment rental. • Inserted a new Appendix 7 for communication with the NOTLSC to get their approval for mooring. Other Appendices updated as necessary. • Updated appendix on Hypothermia to match the document in the Swim Master’s Handbook.
17 Apr 2007 Rev 03	<ul style="list-style-type: none"> • Corrected errors in references to the Sections of the document. • Added “Gender” to the registration and medical forms. • Revisions due to motions carried at 14 Nov 2006 Board meeting: <ul style="list-style-type: none"> • Rule 1 changed to clarify bathing cap restrictions. • Rule 2 changed to clarify swimsuit restrictions. • New rules added as Rules 7 and 8 to address drafting and pacers. • Expansion of new Section 5D regarding pacers. • A minimum age of 14 is added to include the Trial Swim. Added to the Registration and Medical forms, and as the new Rule 13. • Revisions due to the motion carried at 29 Jan 2007 AGM to remove Equipment Rentals from SSO’s activities: <ul style="list-style-type: none"> • Removal of references in Sections 3E and 4 to “available equipment”. • Feeding stick moved from Section 5B to new Section 5C. • Spotlight moved from old Section 5C to new Section 5C. • Removed remainder of old Section 5C “May be borrowed from SSO”. • Tiers 4, 6 and 7 removed from Appendix 6 “Swimmers Fees”. • Removal of Appendices 7 and 8. • Updated new Appendix 9 “Advice for the last month” regarding equipment checks. • Revisions due to Board input 16 Apr 2007. <ul style="list-style-type: none"> • Changed Section 3E and Appendix 5 to indicate that swimmers do not need to submit the Insurance details to the TPA; the list of swimmers and the Insurance details are submitted annually to the TPA by the SSO Secretary. • Added comment to Section 5D on importance of the medical condition of crew. • Rule 9 expanded to require three watches for recognition of a record-breaking swim. • Appendix 3 changed to cover “Boat & Crew” and to detail ages, boating qualifications and medical conditions. • Updated 2006 dating of forms in the three Insurance Forms of Appendix 2.

Date	Changes
25 May 2008 Rev 04	<ul style="list-style-type: none"> • Corrections: <ul style="list-style-type: none"> • Section 3H: Removed mention of “crest” that is no longer available. • Clarified Lake Ontario courses for which recognition is made on the NOTL plaque. • Revisions generated at Board meeting on 1 April 2008: <ul style="list-style-type: none"> • Section 5, A2. Include one lifejacket for the swimmer. • Section 7, Rules: <ul style="list-style-type: none"> • Add headings to paragraphs to ease reading. • Clarify no “jammers”. • Rule 8. Insert missing word “given”. • Add details of recording of the time to the nearest second. • Add details of recording of watches used in a record-breaking swim. • Appendix 5. Updated TPA requirements with their new forms.
28 Jun 2008 Rev 05	<ul style="list-style-type: none"> • Appendix 5 updated with an additional form and associated details to reflect the latest requirements of the Toronto Port Authority. • Details added to Appendix 5 to reflect the requirement to carry Waiver Forms during the swim and to have them available for presentation upon the request of the Toronto Harbour Police.
21 Feb 2009 Rev 06	<ul style="list-style-type: none"> • Section 2, Introduction: <ul style="list-style-type: none"> • Added details of registration as a Charity. • Added details of requirements to register as a Swim Master, with a reference to, and inclusion of, Appendix 17. • Section 7, Rules. Clarified no pacers before five hours have elapsed. • Appendix 1. Signature and date clarified on Registration Form. • Appendix 5. <ul style="list-style-type: none"> • Emphasized that the TPA requirements are open to changes that may not be reflected in the latest copy of the SSORI. • Extended TPA’s processing time to “approximately two weeks”. • Updated “Listing of Support Crew” with statement regarding signatory’s reading and agreement to comply with the listed TPA requirements. • Appendix 6: <ul style="list-style-type: none"> • Further explanation for a registration fee of \$1,250. • Swim Master’s expenses increased from 40¢ to 52¢ per km.
9 May 2009 Rev 06a	<ul style="list-style-type: none"> • Appendix 6, Tier 3 (a). Corrected expense value to 52¢.
18 Jun 2009 Rev 07	<ul style="list-style-type: none"> • Section 4, The Trial Swim. <ul style="list-style-type: none"> • Updated to clarify the requirements for the swim location, and its approval. • Clarified the role of the Swim Master and the SSO Board in determining the acceptability of the Trial Swim. • Clarified requirements for out-of-Ontario trial swims.
26 Jan 2010 Rev 08	<ul style="list-style-type: none"> • Section 5. Added A1c to establish the safe use of kayaks. • Section 6. Modified the Minimum Acceptable Standards regarding Wave Height and Wind Speed. • Section 4. Trial Swim. Added details of recommended pre-Trial-Swim training and associated documentation (Appendix 18). • Section 5, A5 Crew. Updated the requirements for a <i>Pleasure Craft Operator Card</i>.
24 Oct 2010 Rev 09	<ul style="list-style-type: none"> • Section 5. Changes introduced by the Safety Officer. <ul style="list-style-type: none"> • A1a. Removed reference to Loran C, and clarified ship-to-shore recommendation.
17 Jan 2011 Rev 10	<ul style="list-style-type: none"> • Section 3I. Correction to e-mail address. • Section 5D. Increased recommendations for Boat Drivers to have previous positive experience, preferably with the swimmer during the Trial Swim.

Date	Changes
7 Jan 2012 Rev 11	<p>Revisions resulting from Board meeting on 13th December 2011.</p> <ul style="list-style-type: none"> • Section 3H. Removed reference to obsolete “Crest” and updated the timing for delivery of the certificate. • Section 4. Established the mandatory need for the Swim Master to receive, prior to the date of the Trial Swim, written documentation of adequate preparation for the Trial Swim. • Section 5, A5. Added the requirement for a qualified (Bronze Cross minimum) lifeguard in the support boat at the swimmer’s side at all times. • Section 5, D. Added requirement for ALL pacers to have previous open-water and cold-water experience. Also clarified that the pacers may employ swimming aids such as a wet-suit, flippers, <i>etc.</i> • Appendix 6, Tier 2. Provided km conversions for distances cited in statute miles. • Appendix 13. Corrected url for the cited web page.
15 Jun 2012 Rev 12	<p>Revisions resulting from Board meetings on 24th January, 29th March and 5th May 2012, and Swimmers’ Workshop on 2nd June 2012, and SSORI sub-committee.</p> <ul style="list-style-type: none"> • Section 3B: Clarified which forms are required for a sanction to be given. • Section 3B: Clarified the need for the Pre-Trial-Swim Training Log to be submitted and approved prior to the Trial Swim and sanction of the swim. • Section 3B. Clarified when a Swim Master may be assigned to a registered swim “when available after the September preceding the targeted swim date”. • Section 3C: Removed references to the use of SSO lifeguard boats and added the constraint that no two swims are booked to be at the NOTLSC in the same time. • Section 3C Table of Minimum Deadlines: <ul style="list-style-type: none"> ○ Latest date for receipt of Registration Forms changed to April 30. ○ Added Pre-Trial-Swim Training Log. ○ Medical examination to be conducted after January 1 in the year of the targeted swim. ○ Added April 30 as earliest date for submitting TPA requests. • Section 3E: Separated sections for various contact groups, and added contact details for arranging to land at, or use, Marilyn Bell Park or areas under the control of the Toronto Parks authorities. • Section 3F and Appendix 1, Item 5: For swimmers who are not Canadian citizens or legal Landed Immigrants, identified the requirement for them to provide evidence of suitable insurance coverage for their participation in the swim. Also provided details of a Canadian contact to which they can apply for suitable coverage. • Section 3H. Revised the timing for sending certificates for ratified swims and the timing for updating the plaque at Niagara-on-the-Lake. • Section 3I: Removed reference to the supply of information materials that are now covered by the SSORI that is available from the SSO web site. • Section 5, A1b and A2: Added personal floatation device (PFD) to references to life jackets. • Section 5B: Added Light Emitting Diode (LED) light. • Section 5C: Added footwear or matting as Optional items, to prevent foot injuries during entry into the water. • Section 5C: Added to optional feeding tools. • Section 5C: Removed reference to Loran. • Section 5C: Provided additional details for the optional third boat and added GPS to the equipment for the third boat. • Section 5D, Sections 7 & 9, and Appendix 19: Added requirement for a Pre-Swim checklist to document the abilities of all pacers. • Section 5D: Added paramedic to the list of suggested medical crew. • Section 6. Re-worded time-window required for contact with the Swim Master for confirmation of a suitable weather forecast. • Section 7.1: Added clarification of “devices” that may not be used or worn during the swim. • Section 7.1. Added requirement for the swimmer to wear two SSO-supplied lights during periods of darkness. • Section 7.10. Reworded the requirements for the timing and interpretation of the times on the three watches employed for recording a Record Time.

Date	Changes
	<ul style="list-style-type: none"> • Section 8: Added B7 to ensure that other crew members do not get injured by the person who is starting or re-starting the engine. • Appendix 4: Added a notation that the Medical Form is to be completed in the year of the proposed swim. • Appendix 6, Tier 2: Increased the cut-off for lower fee to be 17 statute (land) miles (27 km). • Appendix 10. Expanded advice about weight training. • Appendix 12E. Added extra advice with respect to the current from the Niagara River.
9 Oct 2012 Rev 13	<p>Revisions resulting from Board meeting on 1 October 2012 and SSORI sub-committee:</p> <ul style="list-style-type: none"> • Section 2, Swim Master: Removed comments on “areas of expertise” since the qualifications for a Swim Master are listed in Appendix 17. • Section 3B, Registration and Sanction: Moved the timeline information for TPA forms to “Section 3D Deadlines”. • Section 3C, Deadlines: Clarified deadline for submission of Training Log. • Section 3E, NOLSC: Added note to ensure confirmation of booking for a berth at NOLSC. • Section 3E: Advice to avoid major events such as Caribana and the Airshow. • Section 3E, Marilyn Bell Park: Added a note that, with prior notification, inflatable boats can be removed from the water at Ontario Place Marina. • Section 5A Crew: Integrated with Section 5D. • Section 8A: Added note to respect the Swim Master’s decisions. • Section 8A: Added clause 14 to respect boat owners’ property and equipment and to use only with permission. • Appendix 1, Registration Form: Added SSO and logo to heading. • Appendix 1, Registration Form: Absolute Deadline for registration clarified as April 30. • Appendix 4: Inserted question 4 enquiring about cardiac investigations in the previous two years. • Appendix 4, Medical Form: Added note to append an additional sheet, if necessary, to expand upon YES answers or to provide additional relevant medical history • Appendix 4, Swimmer’s Declaration: Added requirement to notify SSO immediately of any new serious medical condition that arises between the signing of the Medical Form and either the Trial Swim or the Marathon Swim. • Appendix 4, Medical Form, Note 3: Added requirement for any required ECG to be taken in the year of the proposed swim. • Appendix 7, Sections 3C & 3E: Changed abbreviations from NOTSC & NOTLSC (for the Niagara on the Lake Sailing Club) to read NOLSC. • Appendix 7: Added a line to indicate the need, or otherwise, for the small-boat launch-ramp. • Appendix 16: Added “seconds” to the time recorded on the Certificate of Completion.
9 Aug 2013 Rev 13a	<ul style="list-style-type: none"> • Removed Red (Editing) Text from Registration Forms to ensure clarity of printed copies. • So there are no red items in Rev 13a other than in this Revision History.
20 Aug 2013 Rev 13b	<ul style="list-style-type: none"> • Appendix 4, Medical Forms: Changed the format to ensure a physician’s response to the FIT / UNFIT question. • To ensure readability of the Medical forms after they have been printed, no Red corrections are shown on the Medical Form for Rev 13b.
9 Aug 2014 Rev 14	<ul style="list-style-type: none"> • Section 3A: Added statement that SSO reserves the right to refuse to accept an application and to deny sanctioning of a swim for any reason related to safety of swimmer or crew.
16 Sep 2014 Rev 14a	<ul style="list-style-type: none"> • Section 3I, Appendices 4A and 4B: Change in Dr Korzekwa’s mailing address and phone number. • To aid readability of the printed forms, the changes on the Medical Form are not highlighted in red.

Date	Changes
27 Sep 2014 Rev 15	<p>Changes made to clarify the requirements for a Coach who is completely familiar with the swimmer and is able to ensure proper motivation and safety in relation to the onset of hypothermia, pain, etc. Thereby eliminating any confusion with the role of the Swim Master:</p> <ul style="list-style-type: none"> • Section 3B: Identified the role and background of the Coach: in pre-swim preparation; during the Trial Swim; and throughout the actual swim. • Section 3D: Clarified the requirements for the Coach to attend the Trial Swim. • Section 4: Trial Swim: Specified that the Coach shall be in attendance throughout the Trial Swim. • Appendix 1: Registration Form. Clarified that a Coach is mandatory. • Section 10: removed reference to the Swim Master in the introductory paragraph and clarified the role of the Coach.
7 Jun 2017 Rev 16	<p>Based on a detailed analysis of previous Trial Swims and their outcomes for Lake Ontario crossings, the requirements for Trial Swim times for Lake Ontario were revised.</p> <ul style="list-style-type: none"> • Section 4: Revised requirements. • Appendices 18 & 19 renumbered as 19 and 20. • Appendix 18: Data and their analysis in support of the Trial Time analysis applied to Lake Ontario Trial swims. • Section 3E: Contacts at TPA and Toronto Parks have been updated.
13 Dec 2017 Rev 17	<ul style="list-style-type: none"> • Section 3. B Registration and Sanction: Text edited and revised to provide clearer guidance in completing the forms. • Section 3. C. Deadlines: Changes to timeline for submission of TPA forms. • Medical Form: Appendix revised with changes to cardiac and radiographic requirements. • Address for submission added to Registration Form. • Section 4 created for Relay Swims and the other sections renumbered along with corrections of the references to them. • Relay Registration form created as Appendix 2. The other Appendices, and references to them were updated appropriately. • Appendices reordered and renumbered to reflect priorities, with references to the Appendices being revised as appropriate. • Appendix 10: Lake Currents. Condensed slightly. • Appendix 13: Banned Substances. Internet link provided for the latest listing. • Appendix 14: Lake Surface Temperatures. Updated the links within this appendix. • Appendix 20: TPA Application and Waivers. Updated to reflect the most recent requirements.
22 Feb 2018 Rev 18	<ul style="list-style-type: none"> • Section 5 The Trial Swim: Added the requirement that the swimmer must display the use of an adequate feeding plan during the Trial Swim.
15 Mar 2018 Rev 19	<ul style="list-style-type: none"> • Appendix 5 Swimmer Fees. <ul style="list-style-type: none"> ○ Removal of Tier 1 that provided for a mailed version of the SSORI. ○ Renumbering of the remaining Tiers. ○ Increase to \$150 for a Certificate of Completion fee for a Trial Swim that is 10 miles (16km) or more in length.
16 Feb 2019 31 Mar 2019 Rev 20	<ul style="list-style-type: none"> • As of 2019, swimmers are no longer allowed to use the docking or parking facilities of the Niagara on the Lake Sailing Club. <ul style="list-style-type: none"> ○ Updated sections 3C and 3E. ○ Removed Appendix 21. • Appendix 1, Registration Form: Warning added regarding potentially unstable weather at the end of August. Additional rewording on 31 March 2019.

Date	Changes
21 Nov 2019 Rev 21	<ul style="list-style-type: none"> • Section 4, Relay Swims, Item 8 <ul style="list-style-type: none"> ○ Clarified fee for Relay swims under 27 km • Appendix 5, Swimmer Fees, Tier 1: <ul style="list-style-type: none"> ○ Corrected paragraph-numbering error ○ Added “Any SSO-provided safety items . . .” ○ Clarified the amount of Refund that is available for a swim that did not progress to the stage of the intended swim ○ Specified that the Refund would be issued by the end of the Fiscal Year in which the swim was registered.
26 Jan 2021 Rev 22	<ul style="list-style-type: none"> • Appendix 3 Registration, Insurance, Part 2 – Adult and Child versions: <ul style="list-style-type: none"> ○ Changes made to make the rules compatible with current COVID-19 guidelines and restrictions. • Appendix 20, Toronto Port Authority: <ul style="list-style-type: none"> ○ Changes to contact details for the Toronto Port Authority. Changed from Denisha Dorrington to Helen Oel.
3 Jun 2021 Rev 23	<ul style="list-style-type: none"> • Clarification that Pacers are NOT permitted during the Trial Swim: <ul style="list-style-type: none"> ○ Section 3, Swimmer Information, Item D “Trial Swim”. ○ Section 5, The Trial Swim. ○ Section 6, The Equipment List, Item D “Suggested Crew”. ○ Section 8, The Rules, Item 9 “Pacing”. ○ Appendix 8, Early Season Advice, “Pacers”.
23 Jan 2022 Rev 24	<ul style="list-style-type: none"> • Appendix 5, Swimmer Fees: <ul style="list-style-type: none"> ○ Board-approved 7 December 2021. • Revision of Registration Fees, Cancellations, Administrative Fees, and Refunds: <ul style="list-style-type: none"> ○ Cancellations between May 1 and Jun 15, Administrative Fee of \$250. ○ Cancellations after June 15, \$500 Administrative Fee. ○ Cancellations after Trial Swim, No refund.
9 Feb 2022 Rev 25	<ul style="list-style-type: none"> • Appendix 5, Swimmer Fees: <ul style="list-style-type: none"> ○ Board-approved 8 February 2022. ○ \$250 increase on each of the 3 possible Registration Fees.
21 Nov 2023 Rev 26	<ul style="list-style-type: none"> • Appendix 5, Swimmer Fees: <ul style="list-style-type: none"> ○ Board-approved 21 November 2023. • Further \$250 increase on each of the 3 possible Registration Fees.
18 Jul 2024 Rev 27	<ul style="list-style-type: none"> • Appendix 10, Lake Currents: G. Swimming Lake Ontario North to South: <ul style="list-style-type: none"> ○ Board-approved 17 July 2024.
9 Aug 2024 Rev 28	<ul style="list-style-type: none"> • SECTION 7. THE WEATHER: Clarifying that the forecasted weather requirements are for the period “during the anticipated swim-window”. <ul style="list-style-type: none"> ○ Board-approved August 9 2024

Date	Changes
6 Dec 2024 Rev 29	<ul style="list-style-type: none"> • SECTION 2. Introduction: Solo Swims of Ontario: Added a paragraph related to SSO's promotion of equity, diversity and participation in marathon swimming. • SECTION 5: THE TRIAL SWIM: <ul style="list-style-type: none"> ◦ Clarification of the purpose and requirements of a Trial Swim. ◦ Added factors regarding aspirants residing outside of Ontario. ◦ Allowed aspirant to treat an appropriate Trial Swim as a Registerable swim with payment of a full registration fee. The subsequent cross-lake swim would then pay a separate Full registration fee. • APPENDIX 5: Swimmer Fees: Removed Tier 3, as no longer relevant after the changes in Section 5. • APPENDIX 16. Lake Ontario Outcomes and Associated Trial-Swim Times: Added data showing a relationship between the time for a Lake Ontario crossing and its related Trial Swim. • Board-approved November 9, 2024.
14 Jan 2025 Rev 29a	<ul style="list-style-type: none"> • Clarification of wording on Swimmers' Fees. <ul style="list-style-type: none"> ◦ SECTION 5: THE TRIAL SWIM. ◦ APPENDIX 5: Swimmer Fees.