

ICE SAILING MANUAL

**For Ice Optimist and DN sailors
Support for leaders and beginners**

CONTENTS

Safety

Drawings

Sailing

Ice

Accidents

Rules

HISTORY

Ice sailing on skates or with Ice Yacht

As long as there have been skates, sail and wind, people have been sailing on ice. Ice Yacht sailing was mentioned in year 1500-hundred, but it is probably much older. To race with the yacht, they waited to end of the 1800-hundred.

Originally they were sailing in The Netherlands and Scandinavia. The modern Ice Yacht was developed in North America.

The DN Ice Yacht was formed in North America 1937. It was the newspaper Detroit News who announced a competition to build an Ice yacht that easily could be built by anyone in a garage.

The DN Ice Yacht is sailed by one man. The sail measures 6.25 square meters.

The first youth ice yacht with optimist sail was built in Estonia, and was sailed the first time in 1978. At the National secretary meeting 2002 in Balatonfured, the youth ice yacht got a standard and a name: Ice Optimist. The sail measures 3.25 square meters and could be the same as optimist summer sail boat. It is better to use a heavier cloth in the sail, 200g/sqm is suggested, in summer sail it is enough with 140g/sqm.

That is a result of good work in the junior program. Experienced ice sailors from Estonia Poland Great Britain Latvia Lithuania Russia Belarus and Sweden are developing young sailing on ice in a network.

The XV-Yacht is sailed by two men, one is steering and one is taking care of the sheet. The sail measures 15 square meters.

The Class III yacht is a one man yacht, heavier than the DN.

Skate-sailing as sport was started in Sweden around 1880. The first regatta was held in Sweden 1887.

In skate-sailing there are different sails. The so called "Draksegel" (Dragon sail) measures 8.8 square meters, with top speed 90 km/h, and possible to sail four times faster than the wind.

With the "Vingsegel" (Wing sail), it is possible to sail five times faster than the wind, around 110 km/h.

The Kitewing is the newest skate sail. It is an all-round sail that can be used with regular skates, skis or snowboard. An attractive sail among young sailors, easy to sail and to bring with you in a bag.

Safe thinking when you place the yacht on ice

NEVER GO OUT ALONE ON ICE.

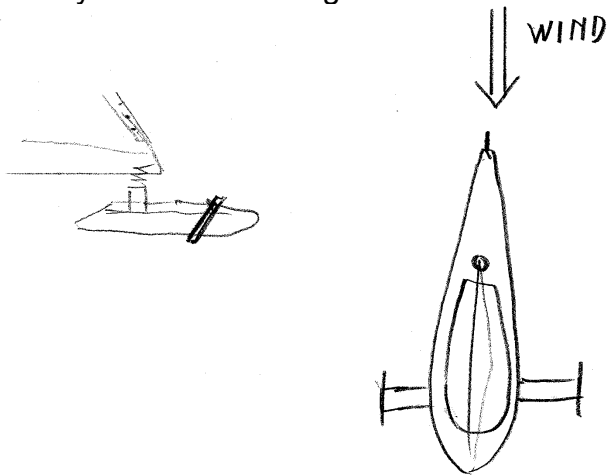
ICE SHOULD BE CHECKED.

WEAR HELMET, SPIKES AND SHOES WITH SPIKES.

WEAR LIFE JACKET ON, OR IN YACHT.

Check what direction the wind comes from.

Place the yacht with steering runner into the wind with the parking brake engaged.



Be observant because the wind can change direction fast.

In strong wind, loosen the rear blocks from fuselage, or pull out the sheet.

Take the sail down and roll it up.

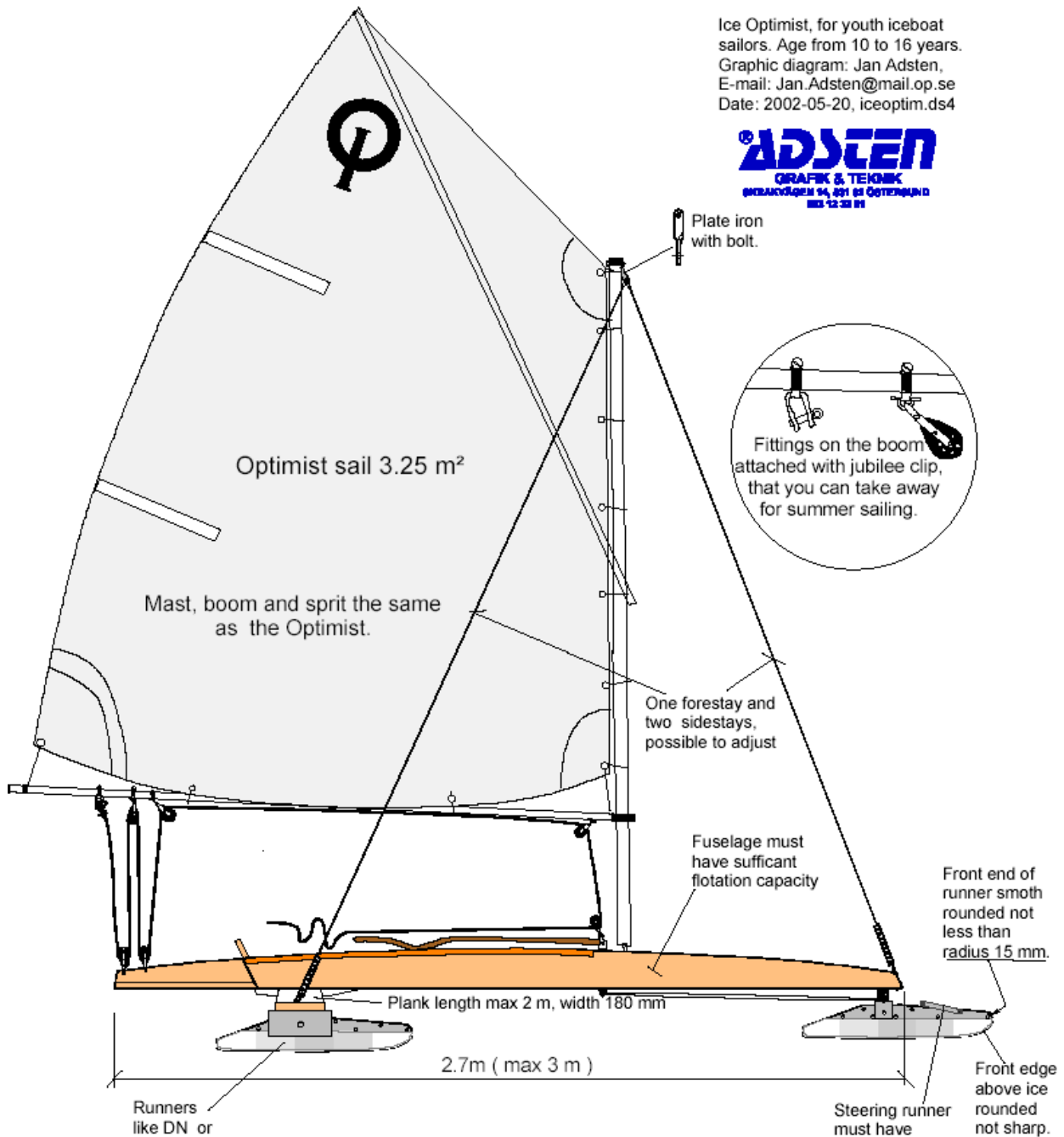
Keep a suitable distance from other parked yachts.

Never leave a yacht with sail without control, someone that does not know how could go out and try to test sailing the yacht. The yacht could also tip over and hurt someone.

When sailing, always keeping the FEET IN THE FUSELAGE, NEVER OUT AND IN FRONT OF THE PLANK

Ice Optimist, for youth iceboat sailors. Age from 10 to 16 years.
 Graphic diagram: Jan Adsten,
 E-mail: Jan.Adsten@mail.op.se
 Date: 2002-05-20, iceoptim.ds4

ADSTEN
 GRAFIK & TEKNIK
 ÖRSKOVVÄGEN 14, 401 01 GOTENBURG
 TEL 12 33 01



Ice Optimist class-rules

Approved by IDNIYRA Europe 2002-04-21

Fuselage - construction and design is optional, maximum length 3000 mm including hardware, the width is optional. Material, wood or laminate. Fuselage must have sufficient flotation capacity. A complete Ice Optimist plus 10 kilograms of weight, must float in open water. Steering - optional construction, technically acceptable, without looseness. Minimum weight including hardware 12 kg.

Plank - maximum length 2000 mm, maximum width 180 mm. Material optional; metal pipe, wood or laminate. Minimum weight including hardware 5 kg.
Sail - as Optimist class, the cloth is optional.

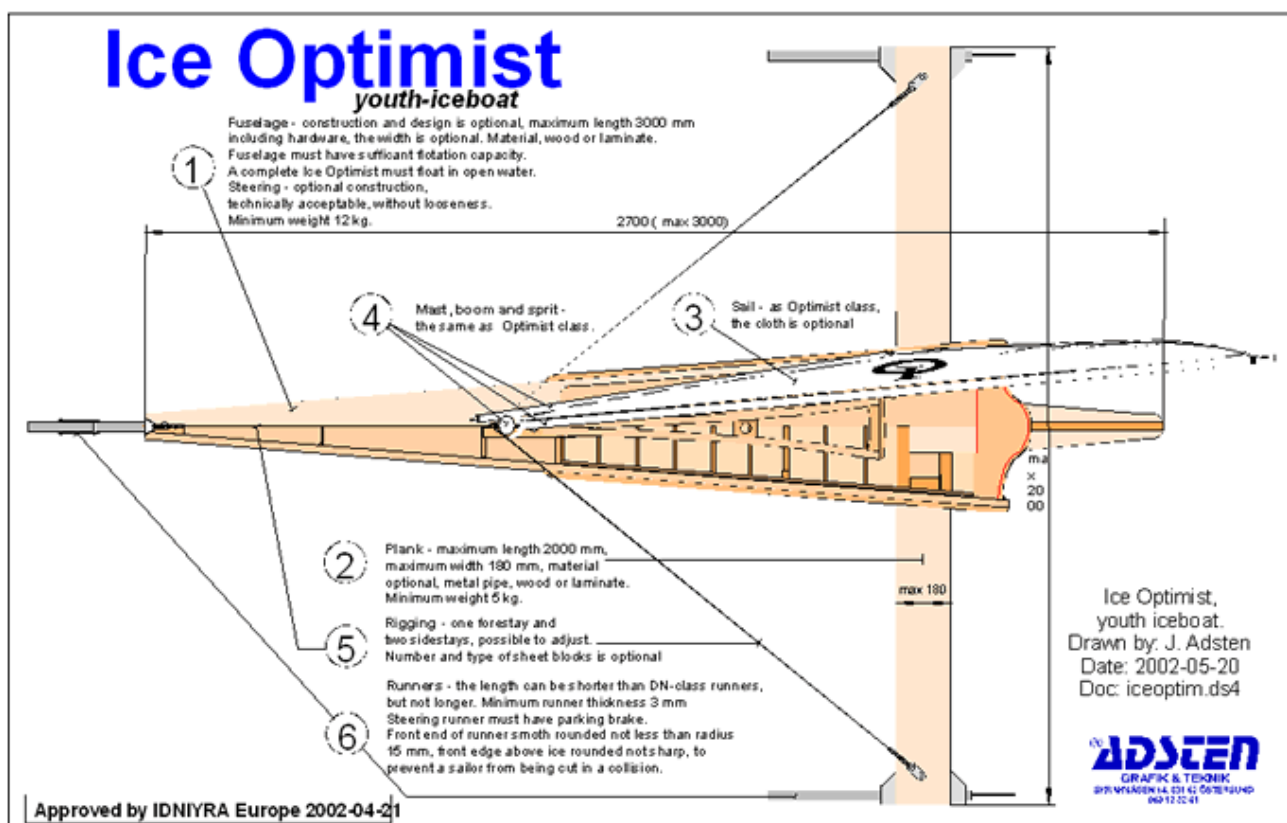
Mast, boom and sprit - the same as Optimist class.

Rigging - one forestay and two side stays, possible to adjust. Number and type of sheet blocks is optional.

Runners - the length can be shorter than DN-class runners, but not longer. Minimum runner thickness 3mm. Steering runner must have parking brake. Front end of runner smooth rounded not less than radius 15 mm. Front edge above ice rounded not sharp, to prevent a sailor from being cut in a collision.

Assemble the parts to make the Ice Yacht ready to sail

1. Start with laying out the plank. The side stay holders pointing forward.
2. Place the side runners in their holders with the “nose” pointing forward, fasten the bolt.
3. Place the fuselage on the plank, secure with the bolt through the plank and body.
4. Place the steering runner in the fuselage front holder, with the nose pointing forward. Fasten the bolt. Let the parking brake down.
5. Fasten one side stay on the plank (the two side stays are the same length). The forestay is placed in the middle, fasten it on the front of the fuselage. Fasten the mast on the mast step, and go over and secure the other side stay on the plank.
6. Start to tie the sheet on the block that is placed furthest back on the boom or fuselage. Thread the sheet through the blocks and let it run along the boom to the booms front block and down through to the main block, secure the sheet with an eight knot.
7. On the Ice Optimist you tighten the sail with the sprit. There is a loop on top of the sail, and another loop in cordage tied on the mast. Place the sprit in the loops and tighten with the cordage.

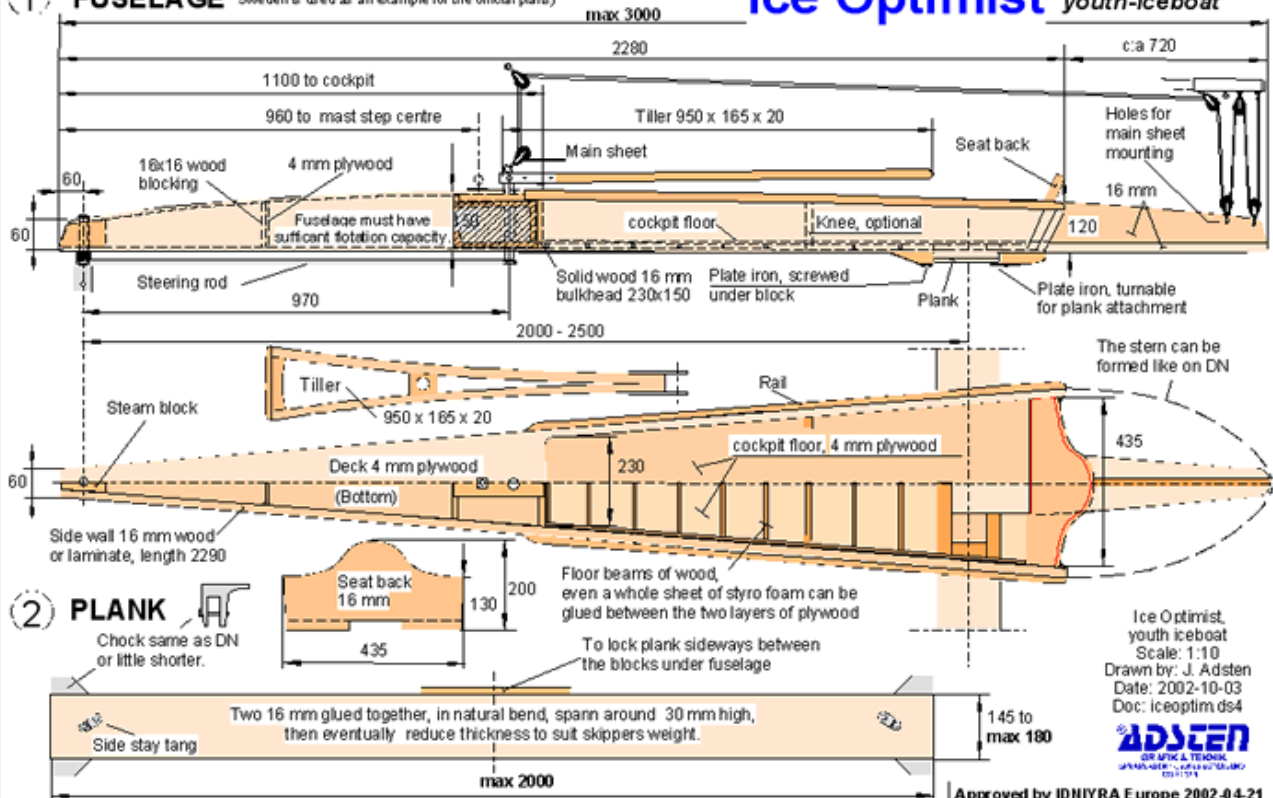


1

FUSELAGE

(This design, simple to build, from Västerås and Ludvika, Sweden is used as an example for the official plans)

Ice Optimist youth-iceboat



Ice Optimist youth iceboat
 Scale: 1:10
 Drawn by: J. Adsten
 Date: 2002-10-03
 Doc: iceoptim ds4
ADSTEN
 GRAFIK & TEKNIK
 S-141 84
 0813 33 56

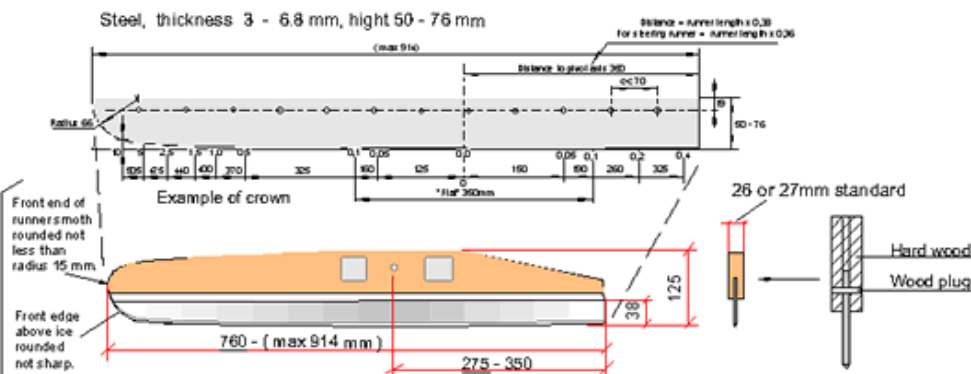
6

RUNNERS, partly from DN-class

Ice Optimist youth-iceboat

INSERT RUNNER

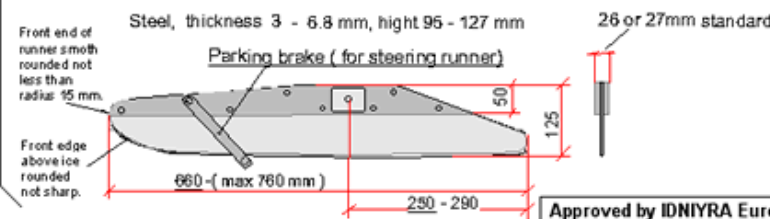
Steel, thickness 3 - 6.8 mm, high 50 - 76 mm



Both of this specs. are designed to prevent sharp leading edges on runners, which might cut a sailor in a collision.

PLATE RUNNER

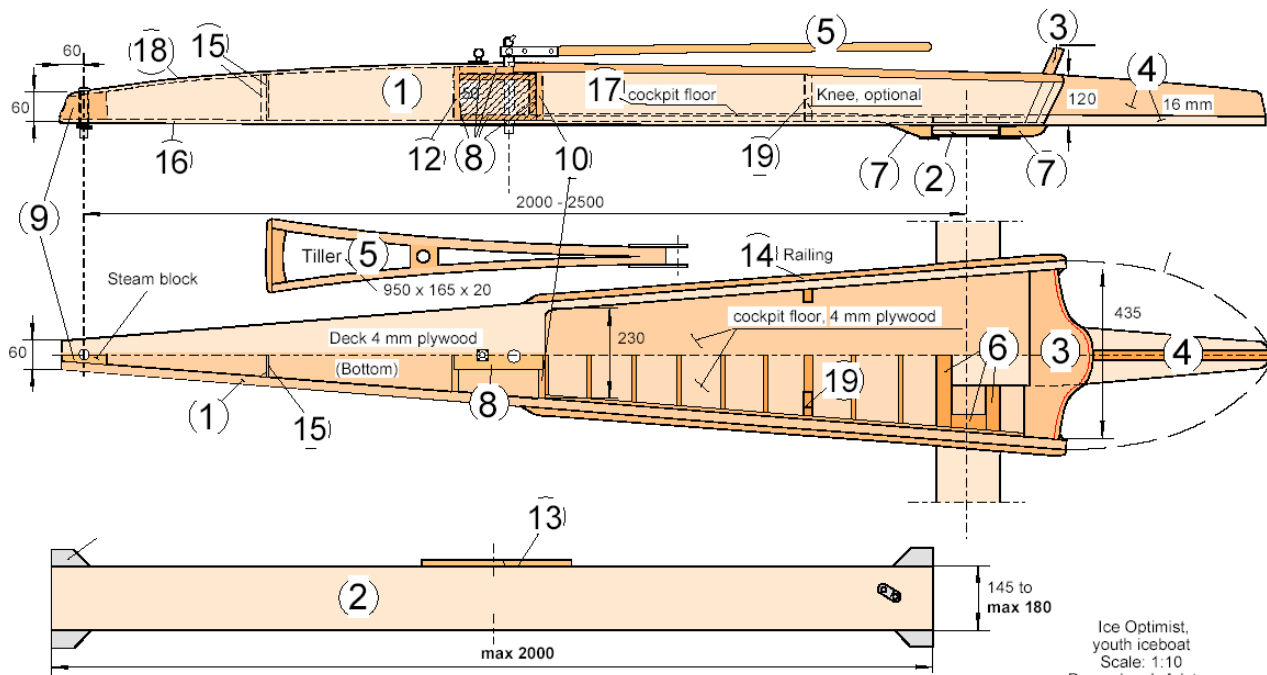
Steel, thickness 3 - 6.8 mm, high 96 - 127 mm



Ice Optimist youth iceboat.
 Drawn by: J. Adsten
 Date: 2002-05-21
 Doc: iceoptim ds4

ADSTEN
 GRAFIK & TEKNIK
 S-141 84
 0813 33 56

Approved by IDNIYRA Europe 2002-04-21



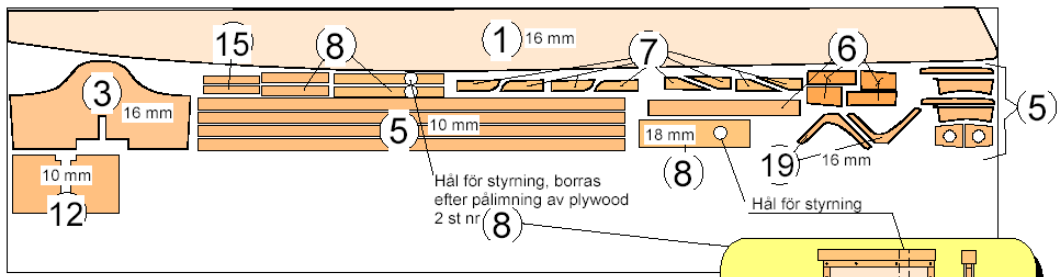
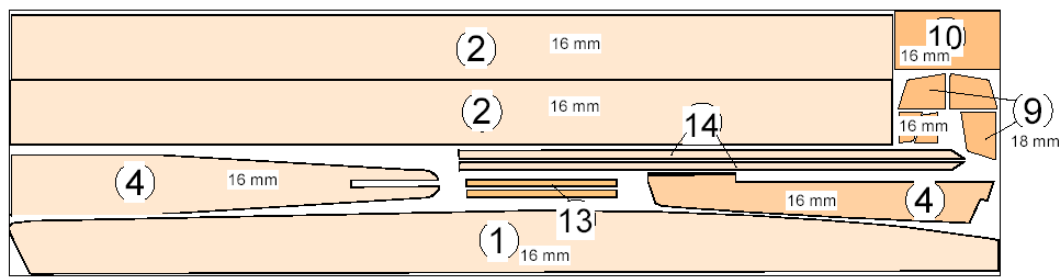
Ice Optimist,
youth iceboat
Scale: 1:10
Drawn by: J. Adsten
Date: 2002-10-07
Doc: iceoptim.ds4



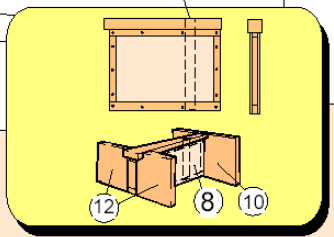
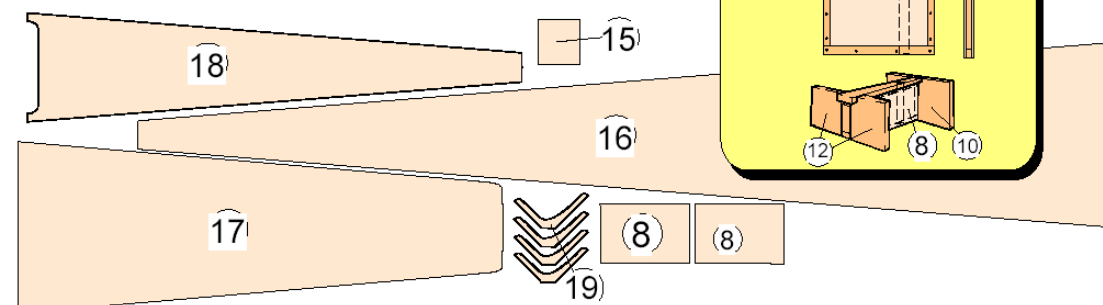
**UTBREDNING
AV DETALJER**

2 x 16 mm, limmas ihop, hängande upp och ned mellan
mellan två bockar, en i vardera änden, så att ett spann på 40-45
på mitten mäts upp, för att ge 30 mm spann när tvingarna öppnas.

Limfog gran, 18 mm
kan hyvlas ned till 16 mm



Plywood 4 mm



Hints for Trim

Sail

Flat sail to be used in hard wind.

Deep sail in light wind.

Storm sail that has less surface, and is to be used in heavy wind.

Sail with more depth for beginners.

The first sail can be a used summer sail in Ice Optimist class.

Runners

Short runners when snow on ice or light wind, they are easier to manoeuvre without losing speed.

Long runners at good wind and good ice. The yacht runs smoother with a long running surface.

The temperature decide the hardness of the runners you choice. At lower temperature it is suitable with softer steel.

Angle on the runners should be sharp with 90-100 degrees edge on the ice. Flat curve.

It is important to have the runners adjusted parallel.

Bigger curve when snow on ice.

Flatter curve for good ice.

Store the runners and fuselage in a dry place, not outside, they can bend.

Mast

For the Ice Optimist it is often the same mast and boom as the Optimist sailboat, aluminium.

For the DN-yacht it could be a homebuilt mast in wood.

In racing the fibre glass mast with carbon fibre reinforcements is often used, it has more movement than the wooden mast or the aluminium mast. The carbon fibre mast works together with the sail

In hard wind it could be good with a soft mast to compensate the sail.

On DN yacht the mast gets stiffer when placed maximum back. And gets softer when placed forward.

When hard wind and placed maximum forward, watch out that it doesn't crack.

Ice Yacht sailing countries letter marks

DN Yacht should have a 25 cm high country mark and registration number on both sides of sail.

Ice Optimist should have an 8-10 cm high country mark and registration number on the side of fuselage at mast step level.

At a race the sail should have the disc and optimist logotype.

Commercials are not allowed on sail

B	Belarus
C	Estonia
CZ	Czech Republic
D	Denmark
G	Germany
H	Netherlands
I	Italy
K	United Kingdom
L	Finland
M	Hungary
N	Norway
O	Latvia
OE	Austria
P	Poland
R	Russia
S	Sweden
T	Lithuania
Z	Switzerland
US	USA
KC	Canada

Time to sail on ice!

Fold up the parking brake.

Keep the side stays loose in the beginning, later you can adjust them.

Figure out what direction the wind comes from.

Place you self on the same side where the wind comes in from.

Take the sheet in the hand you are holding the side stay and the other hand on the tiller.
Or if you prefer sheet and tiller in one hand and side stay in the other.

Push the yacht forwards, fall off the wind a little and let the wind help you to fill the sail and push the yacht.

Step up on the plank with one foot and slide the other foot into the fuselage and sit down or lay down.

Try to pull the sheet and tighten the sail, and steer up towards wind alternately fall off with the wind.

To stop the yacht you sail into the eye of wind. Nose pointing up towards wind.

You are tacking up against the wind and you are sailing with the wind reaching.
In half wind, the wind is coming in right from the side.

Training practice, suggestions for some exercises

Area of ice should have been checked before.

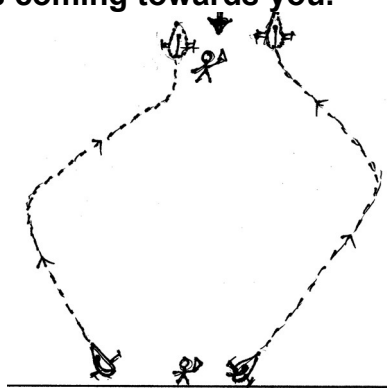
Area should be marked with flags, no other sailors than beginners are allowed in that area.

One way is to go out with skates on, and give instructions when skating beside the yachts.

Another way is to “copycat”, you sail first and the young sailor is copying you from behind.

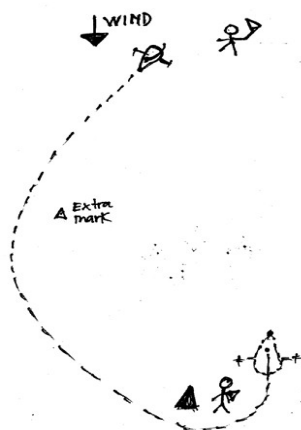
It is important to learn to sail the yacht safely, in the first practice on ice you should learn how to stop the yacht.

How to stop when the wind is coming towards you.



Line up the sailors with safe distance between them, so they do not sail into each other. Place a mark or another leader ca 150 meters up towards wind. Start them one at a time and let them sail up to the wind mark/leader and stop there up against the wind. Let them try to start on both starboard and port tacks.

To stop when the wind is coming in from behind.



You can place a third mark in the middle to the left. Place a mark/leader ca 150 meters down leeward. Line up the sailors with safe distance between them. Start them one at the time. Let them sail down to the leeward mark. Let them sail around the mark coming in from the left side and stop on the right side of the leeward mark up against the wind.

To stop when the wind is coming in from the side.

Place a flag/leader ca 100 meters out from the leeward mark on both sides. Let the sailors try both with wind coming in port side and from starboard side. They should round the flag/leader and stop up against the wind.

If there is snow on the ice and you have access to a plough, make a round track. You can also make a round track with flags. It is enough with only 50 meters radius in the beginning. Place you self in the middle and give instructions.

Sail instruction for ice Optimist

Written by S 510 Imme Zarins

Start

Line up on the start line with a slight angle towards wind – the sail not too hard home sheeted. (Leeward runner against start number)

Run as fast as possible.

Jump into yacht when you have built up speed.

Fall off if possible to get good wind into the sail (watch out so you do not sail into the yacht that is in the lee of you)

Sheet home with care.

Carefully steer up towards wind and try to find the right angle (as high as possible, with the sail “pulling” all the time.

If you have been starting with the wind in from starboard side:

Tack when you are up 2/3 against the windward mark

Tack again when you estimate that you are able to sail around the windward mark.

If you have been starting with the wind in from port side:

Keep on sailing until you estimate that you can sail around the windward mark and tack

Sail around the windward mark with almost full sheet and keep the wind coming in from behind on the starboard (right) side

Keep on sailing that way until you estimate that you can steer to the right of the leeward mark

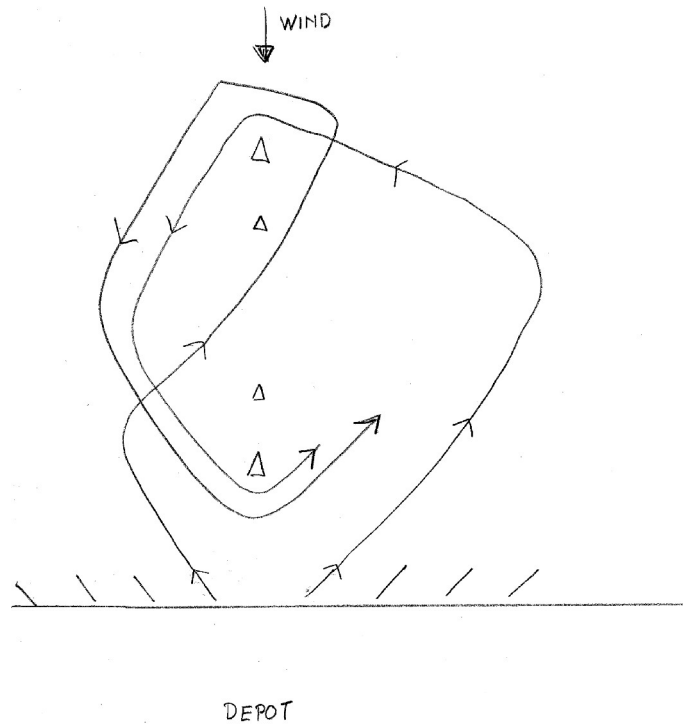
Jibe so that the wind is coming in from behind on port (left) side

Sheet almost full. When you feel that the yacht could not sail any faster, loosen the sheet up to catch the wind again.

Sail around the mark so that you have it on the left side of you

Now you have been sailing one round, and you go on the same way the remaining rounds.

Finish



Finish by crossing the finishing line and turning right or left.
Finish line is a line between leeward mark and flag to the right.

Sail to the depot right after finish!!!!!!!. You must go round the left or right end of starting line to get to the depot. If you cross the starting line with your runners, you will be disqualified, and that can damage your runners.

ICE KNOWLEDGE

Always check the ice prior to sailing, and cordon off the beginners sailing area.

Water does not have the same weight at different temperatures. The water weighs less when warmer.

Water has the most weight at +4 degrees, and is lighter at 0 degrees.

When colder weather comes in the autumn, the surface water will be chilled and it gets heavier and sinks.

The warmer water will be rising, and be chilled and sinks and so on...

The water will be layered(sighted), when the whole water mass is +4 degrees the movement in the water stops.

This mixture of the water is important for the oxygen content in the water in the spring and in autumn.

The water starts to freeze when the surface temperature is 0 degrees.

Water with salt content freezes at lower temperatures, $-1/2$ degree. And has the most weight at +2 degrees.

The black ice is hard and dark, the ice crystals grows in column formed down.

This ice will grow very strong.

Snow ice. There are no organized crystals and air bubbles, the colour is white or greyish.

This ice is not as strong as black ice.

Black ice can be built under snow ice if weather keeps cold.

Ice build up: 2,5 mm/day/degree in sub-zero conditions, then you have to take account of the wind, cloud cover and moisture in air.

Snow on ice stops ice growth. When there is 30 cm of snow there is practically no increase at all.

You have to watch out when snow lays in drifts, there it could be weaker ice, or no ice at all!!!

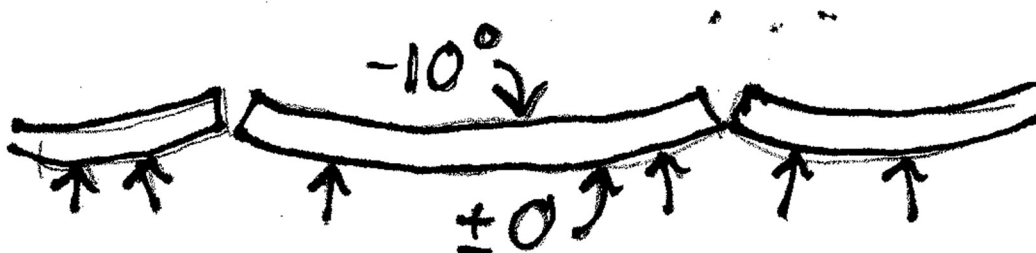
Sea ice can quickly freeze, and also quickly melt.

4 cm of ice can carry a man of 80 kg, if there are cracks in the ice it has to be 8 cm thick to carry the same man.

Why are there cracks in the ice? The temperature under ice is close to freezing point.

When cold the surface of the ice will pull together and bend and crack. Water fills the cracks through up ward pressure and the ice surface increases.

The ice will then slide up on land.



When the snow gets so heavy that it presses the ice down. Water will be pressed through the cracks and the snow soaks the water up. When the water reaches the surface, the snow gets grey. The snow will then freeze from top to bottom.

Do not assume that the ice will be equally thick. There could be wind wells or lee wells formed, at places where the water moves for some reason. When water is pushed together, the water speed will increase, for example shallow places round islands where water flows in or out. Or where the water is in the lee, when the cold surface water blows down on the lake and the warmer water comes up in lee for the wind. It is also a risk under bridges where the heat radiates less.

Ice Report, considerations when evaluating your ice conditions

How long ago did it freeze? 2003 12 25
Centimetre of ice 25 cm
Minimum Centimetre 15cm
Ice thickness under snowdrifts 6 – 3
Any holes?
When did the holes freeze?
Any seams or ice heaves?
Any Fisherman or other Obstacles
Snow cover 100%
Deepest snow 10
less than Sarns stiffener height on the West end
Percent clear 0

LOCAL WEATHER FORECAST 10 – 15 degrees north wind

ICE QUALITY – Rate which of the following applies

- 1.New black ice
- 2.Hard smooth ice
- 3.Medium hard ice
- 4.Soft snow ice
- 5.Soft spring slush ice

ICE SMOOTHNESS – Rate which of the following applies

- 1.Like mirror under snow
- 2.Smooth with some small bumps
- 3.bumps or rough ice
- 4.Old frozen drifts or very rough ice, but it is sailable

Any melted drifts or slush holes?

How long a course can we have in kilometres?

What is the access of ice?

Can we drive or roll a trailer onto the ice?

Thanks for the great report.

Your phone and contact info in case more information is needed:

Ice knowledge and safety on ice

Will the ice hold?

Ice is strong. Did you know that a car needs 20 cm of ice to support its own weight? The table below shows the weight in ton vertical, and the ice in centimetre horizontal.

Warning!! The ice in the spring is very weak.

20 centimetre in the spring time would not bear an adult.

The effect of chilliness will increase with the wind speed.

The more the wind blows the chilliness factor will increase on bare skin. See the table wind speed (m/s) and air temperature (Celsius).

Accidents on ice

We always have to think in safety terms, when we are out on ice. To have the right clothing under present conditions. To have ice-sense and know the rules.

Has somebody checked the ice?

Do you have somebody with you?

Are you safe equipped with spikes?

Do you know where there could be hazards?

Have you listened to the weather report for the day?

The more you know about the ice, the more interesting it gets. Talk to the people you meet out on ice, ask them what they know, and tell them what you know. Always share with others what you have learned.

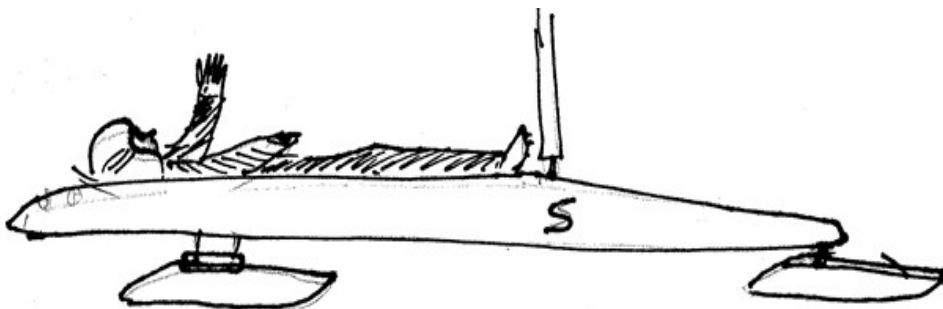
At accidents on ice, it is important that the injured do not lose body temperature.

The person should not be lying direct on the ice.

Try to find shelter from wind. The ice yacht will be a good stretcher. Does anyone have spare clothing to keep the injured warm?

If possible keep the injured part of the body high to avoid swelling.

Head injuries could be more or less serious. If a person has been in a faint or has loss of memory, THEN IT IS SERIOUS. Also when the person is feeling sick or is vomiting. The person should be taken to Hospital as soon as possible in a careful way.



Injuries with frostbites

Be observant on your friends. Has anybody spots with white skin? That is the first sign of frostbites. Cover with for ex, shawl or robber hood, for the wind. When it is about fingers or toes, the armpit is a good and warm place. You might have to borrow the armpit of a friend or let a friend use yours.

If your friend falls into the water, it is easy to panic. Especially when the head will be chilled by the water, you act irrational and need to be calmed down in your coldwater shock!

After 10 minutes in water the body temperature starts to sink.

From body temperature 37 down to 34 degrees, you can get an answer from the person who is shivering.

With a body temperature between 34 down to 32 degrees, the person starts to be indolent and shiver less.

By 32 down to 30 degrees there is no more shivering, the muscles get stiff and the person gets in to a state of unconscious.

From 30 down to 26 degrees it is hard to feel pulsation or see breathing. Unconsciousness occurs.

As long as the person can be told to move himself it is important that he does, he should also be protected from wind and get dry clothing.

Never stand barefoot on ice!

If the person has started to be unconscious and is shivering less. Then it is important that the person will be HANDLED WITH CARE. Otherwise the cold blood will come to the heart and could cause heart rhythm disturbance, so called heart "flimmer" and the person could die.

Important to get the person fast and with care to hospital.

Alarm routine

Call **112** and tell:

1. What has happened?
2. How many are injured?
3. Your name?
4. What telephone number do you call from?
5. At what location has the accident happened?
6. Can you describe the location?
7. Can you meet at the road?

FLOWCHART A B C D E T W

Before you alarm, check that the injured has FREE AIRWAY. Minutes without air could give irreversible brain damage.

1. Airway

Talk to the injured – Mouth inspection – Make free airway – neck control, neck support.

2. Breathing

Breathing control – Help to breath oxygen – Skin colour – Blueish=cyanosis .

3. Circulation

Stop bleeding – Avoid circulation shock – Pulse control – Visible bleeding – Pressure – High level for injured part.

4. Disability

Consciousness control – Awake – react when talking to – React on pain – No reaction.

5. Exposure

Body examination – Protection against cold weather – Look for injured parts.

6. Arrange transport

Arrange transport – Alarm – Own vehicle.

7. Watch over

Consciousness – Breathing – Pulse.

Equipment to be used to arrange a regatta in ice sailing

Start line on two rolls, in colour.

2 Marks in bright colour, reddish orange is good, 1,5 to 2 meters high.

2 Dolly marks in bright colours, same as above, 1 meter high.

Flags:

Red for the starting line and finishing line

Blue for the waiting zone

Starting flags

Wind meter

Whistle

Time watch

Bulletin board

Scoring pads

Starting lists

Lap record lists

Megaphone

Pencils

Writing pen

Medical bag

Rescue equipment

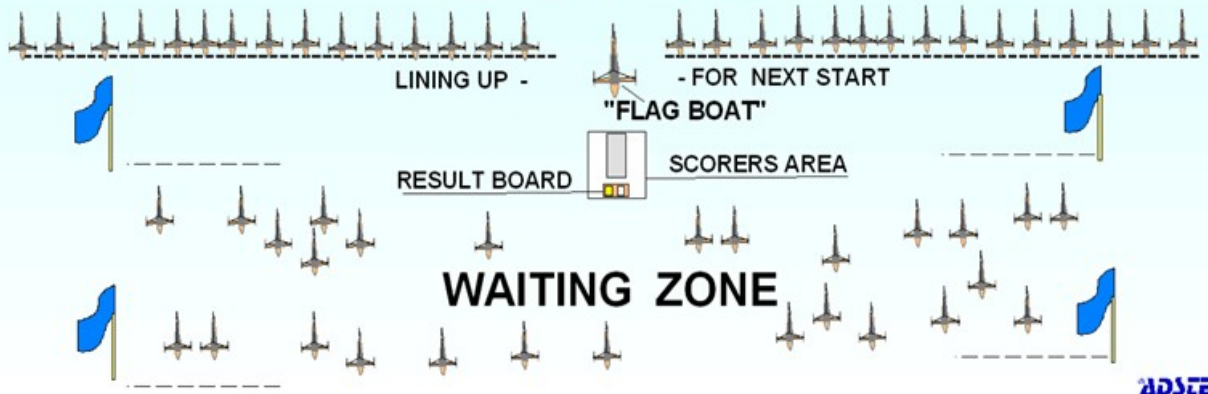
Mobile telephone

- SIGNS ON "FLAG BOAT"
- A** GOLD FLEET
 - B** SILVER -
 - C** BRONZE -
 - D** ALUMINUM -

RACING COURSE
WORLD & EUROPEAN CHAMPIONSHIPS 2004



SAFETY ZONE



INTERNATIONAL DN ICE YACHT RACING ASSOCIATION STANDARD SAILING INSTRUCTIONS.

1. **RULES** All races will be sailed in compliance with the specifications, Constitution and By-laws of the International DN Ice Yacht Racing Association and the rules of the National Iceboat Authority as modified herein.

2. **COURSE LOCATION** – The racing area will be indicated on map posted on the official bulletin board.

3. **MARKS** – Marks will be displayed at the Skippers meeting.

4. **STARTING TIMES** -

Skippers meeting:

First race day one:

First race day two:

First race day three:

Starting times of subsequent races each day will be announced by the Race Committee Chairman, reference IDNIYRA By-Laws

5. **STARTING AND FINISHING SIGNALS** – The starting signal will be the swift lowering of the starters arms or flag after he raises his arms or flag to signify the preparatory signal. If the start is to be delayed after the preparatory signal the starter will slowly withdraw his arms or flag. The finish of the first boat will be indicated by the dropping of flag by the race committee.

6. **TIME LIMIT** – The Lap time limit is 6-1/2 minutes per 1 mile (1.6km) between marks=13 minute lap time limit.

7. **PROTESTS** – Intention of protest must be reported to the Race Committee immediately after the race. A written protest must be filed with the Race Committee Chairman within one hour of the race.

8. **TALKING TO SCORERS** – A skipper who attempts to speak to the scorers while a race is in progress may be liable to disqualification from regatta.

9. **STARTING LINE** – The Race management Team may adopt the “Wire” starting line system if approved by the Governing Committee members present.

Note: This is suggested format for IDNIYRA regatta sailing instructions.

A complete knowledge and understanding of the following racing rules is critical to safe racing. Be sure you know and understand them before you race.

THE RACING RULES OF THE NATIONAL ICEBOAT AUTHORITY

PART 1 – DEFINITIONS

When one of the terms defined in part 1 is used in its defined sense in the definitions or rules, it is printed in CAPITAL LETTERS. All definitions rank as rules.

ACTUAL WIND – The natural wind

WINDWARD - LEEWARD COURSE – A course sailed around two MARKS, an imaginary straight line drawn between the two MARKS is parallel to the ACTUAL WIND.

ON – THE – WIND- A yacht heading less than 90 degrees from the direction from which the ACTUAL WIND is blowing is ON – THE – WIND.

OFF – THE – WIND – A yacht heading more than 90 degrees from the direction from which the ACTUAL WIND is blowing is OFF – THE – WIND.

STARBOARD TACK – A yacht is on STARBOARD TACK when the ACTUAL WIND is approaching from her right side.

PORT TACK – A yacht is on PORT TACK when the ACTUAL WIND is approaching from her left side.

WINDWARD YACHT and LEEWARD YACHT – When two yachts are on the same tack, the one on the side from which the ACTUAL WIND is blowing is the WINDWARD YACHT, the other is the LEEWARD YACHT.

TACKING – A yacht is TACKING from the moment she is beyond head-to-ACTUAL WIND until her mainsail has filled on the other side.

JIBING – A yacht is JIBING when, the ACTUAL WIND aft, the foot of her mainsail crosses her centreline until it has filled on the other side.

OBSTRUCTION – Any object a yacht cannot safely sail over.

MARK – Any object which a yacht must round or pass on a required side to properly round the course.

OUTSIDE – In rule 8 of the Right-of Way rules, any yacht to the right of another yacht is the OUTSIDE yacht.

CANCELLATION – A CANCELLED race is one which cannot thereafter be sailed.

POSTPONEMENT – A POSTPONED race is one which is not started at it's scheduled time and which can be sailed at any time the Race Committee may direct.

ABANDONMENT – An ABANDONED race is one which is stopped while it is in progress and which can be re-sailed at the discretion of the race committee.

PART IV – SAILING RULES

The purpose of the following rules is to prevent collisions. Any infraction of these rules is cause for disqualification.

A.Fair Sailing – In all situations the Judges, Race Committee, and contestants must act in

terms of common sense, safety, and good sportsmanship.

B. Right – of Way Rules

1. A yacht in motion shall keep clear of yacht stopped.
2. A Yacht sailing OFF-THE-WIND shall keep clear of a yacht sailing ON-THE WIND.
3. When two yachts are sailing OFF-THE-WIND, the yacht on the PORT TACK shall keep clear of the yacht on the STARBOARD TACK.
4. When two yachts are sailing OFF-THE-WIND, the yacht on the PORT TACK shall keep clear of the yacht on the STARBOARD TACK. When two yachts sailing ON-THE-WIND are on the same tack, the WINDWARD YACHT shall keep clear. When two yachts sailing OFF-THE-WIND are on the same tack, the LEEWARD YACHT shall keep clear.
5. A right-of-way yacht shall not alter her course so as to mislead or prevent a non-right-of-way yacht from keeping clear. When a faster moving yacht approaches another yacht on the same tack from the rear, the faster yacht must not sail so close that the slower cannot keep clear.
6. A yacht may not TACK or JIBE so as to involve the probability of collision with another yacht which, owing to her position or speed, cannot keep clear.
7. A yacht approaching and unable to clear an OBSTRUCTION without fouling or endangering another yacht may signal the other yacht for room to clear. The signalled yacht shall at once give room and if it is necessary for her to TACK or JIBE, the signalling yacht shall also TACK or JIBE immediately thereafter.
8. When approaching or rounding a MARK, an OUTSIDE yacht shall keep clear and faster moving yacht approaching another yacht from the rear shall stay clear of a yacht that has started her rounding manoeuvre. Each yacht shall be entitled to room to cross the finish line.
9. After finishing a race, a yacht shall keep clear of the course and yachts still racing.

C. Sailing the Course

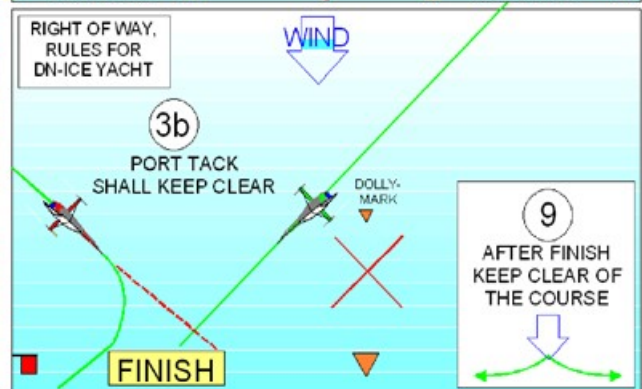
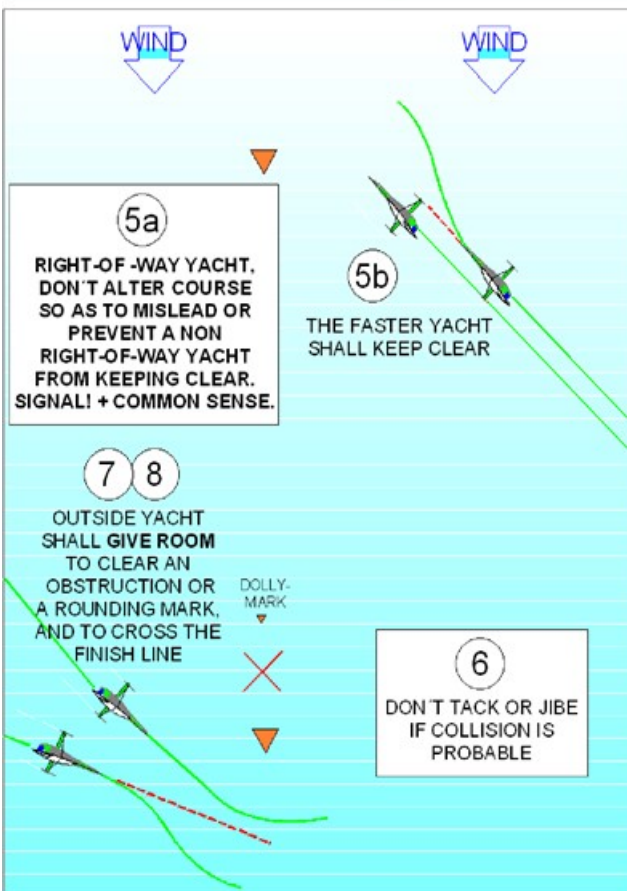
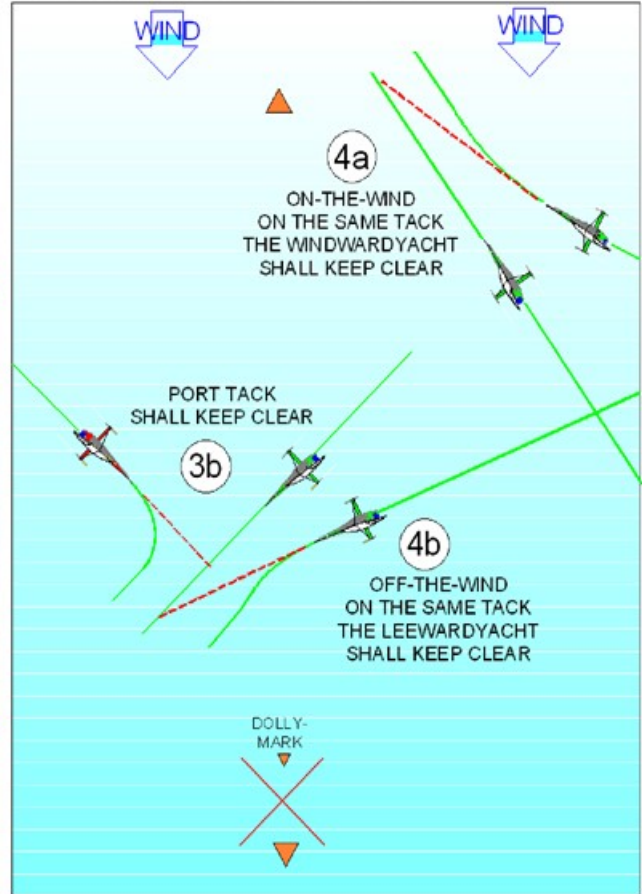
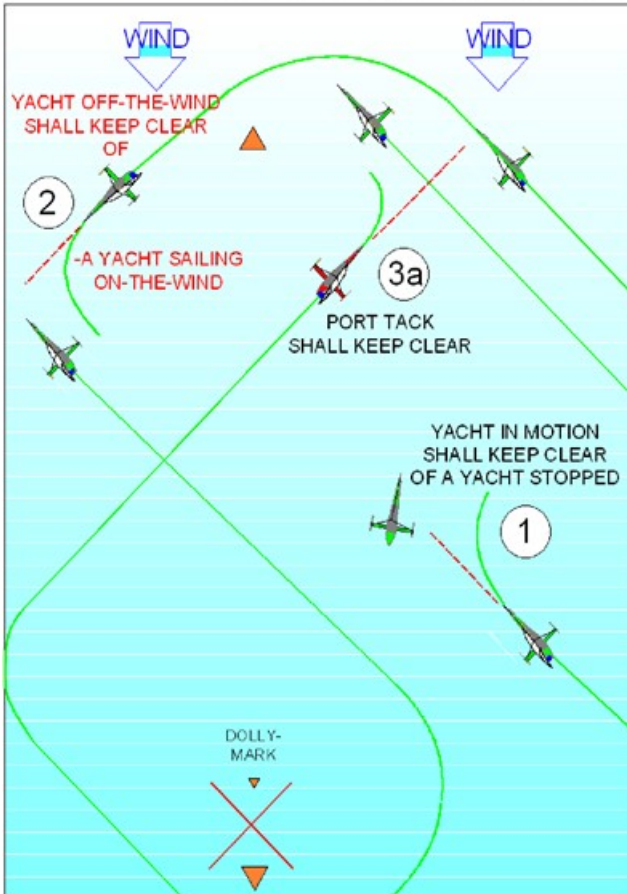
1. At the start, a yacht must be laid off (headed) similarly to other yachts on the line. A skipper may demand that the race committee require another yacht to change the degree to which she is laid off.
2. A Yacht shall be disqualified without protest if she starts prematurely.
3. A yacht fouling a MARK (except when avoiding an accident), not leaving a MARK on the required side, or not rounding all MARKS in proper sequence, shall be disqualified.

D. Propulsion – A yacht may not employ any means of propulsion other than the action of the wind on the sails. However, the crew (unassisted by anyone except for reasons of physical disability as authorized by the Judges) may push the yacht to leave the starting line or to return the yacht to wind propulsion when necessary. Other pushing shall be cause for disqualification.

E. Ballast – A Yacht must start and finish a race with the same ballast and crew.

Be observant that the instructions and the rules may change.

RIGHT OF WAY and SAFETY REQUIREMENTS for ICE BOATS



ACT IN TERMS OF COMMON SENSE, SAFETY AND GOOD SPORTSMANSHIP!

DATE: 2002-01-03

Anti Doping

The Swedish Icesailing Federation's anti doping program is based on the WADA list (World Anti Doping Agency) which covers :

Prohibited classes of substances and Prohibited methods

You can find more about antidoping on www.wada-ama.org , www.rf.se and at the pharmacy .

We know that ice sailing is a low-priority sport for doping.
Still you have to accept that it could be a possibility, or that you take medicine without knowing that it is classed as doping.

Anti doping programmes are made to protect athletes from getting injuries.
Clean winners is a matter of course in sports.