

## Flays of the I.L.Y.A. Code of Signals



## Wig-Wag Signal Gode,

## U. S. NAVAL.

## ALPHABET.

| A | 22. | H | 122. | O | 21. | Y | 1222. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| B | 2112. | I | 1. | P | 1212. | W | 1121. |
| C | 121. | J | 1122. | Q | 1211. | X | 2122. |
| D | 222. | K | 2121. | R | 211. | Y | 111. |
| E | 12. | L | 221. | S | 212. | Z | 2222. |
| F | 2221. | M | 1221. | T | 2. |  |  |
| G | 2211. | N | 11. | U | 112. |  |  |

## ALPHABET CLASSIFIED.

| I | 1. | J | 1122. | A | 22. | F | 2221. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| N | 11. | C | 121. | D | 222 | S | 212. |
| Y | 111. | Q | 1211. | Z | 2222. | X | 2122. |
| E | 12. | I | 1221. | O | 21. | B | 2112. |
| H | 122. | P | 1212. | R | 211. | K | 2121. |
| V | 1222. | W | 1121. | L | 221. |  |  |
| U | 112. | T | 2. | G | 2211. |  |  |


| End of a word | 3 |  |
| :--- | ---: | :--- |
| Cease signaling, A. A. A. 333. |  |  |
| End of a sentence | 33. |  |
| Repeat last word C. C. 3. |  |  |
| End of a message | 333. | Repeat last message C.C. C. 3. |
| I understand | A. A. 3. | I have made an error, E E. 3. |

## FLAGS

Signaling by wig-wag is carried on by waiving a flag fastened to a staff in certain defined ways, represented by the figures 1,2 and 3 , and thus letters are made and words spelled.

There are two wig-wag flags, one a square white flag with a red square in the centre, and the other a square red flag with a white square in the centre.

But one flag is used in signaling, and that one is selected which can be the easier seen against a flagman's background.

## RULES.

1. The flagman should face the person to whom he is signaling, and should hold the flag staff vertically in front of the centre of his body with the butt at the height of his waist.
2. The motion represented by the figure 1 is made by waiving the flag down to the right; 2 by waiving it down to the left; and 3, by waiving it down in front of the sender.
3. Each motion should embrace an are of ninety degrees, starting from and returning to the verticle without a pause.
4. When two or more motions are required to make a letter, there should be no pause between the motions.
5. At the end of each letter there should be a slight pause at the vertical.
6. At the end of each word, one front motion (3) should be made; at the end of a sentence, two fronts (33); and at the end of a message, three fronts ( 333 ).
7. To call a yacht, signal the initial letter of her name until answered. Toanswer a cail, signal A. A. 3 (I understand).
8. If the sender makes an error he should immediately signal E. E. 3 (I have made an error), and resume the message, beginning with the last word sent correctly.
9. If the receiver does not understand a signal, he should signal C. C. 3 (Repeat the last word); the sender should then repeat the last word and proceed with the message.

## NOTICE.

It is especially requested that all yacht owners carry a private signal, and that they design or have designed a special flag of their own, and that a cut or description of this be furnished the secretary of the Inter-Lake Yachting Association, so that a full description of these private signals may be publtshed in colors in the next annual catalogue of the Inter-Lake Yachting Association.

## Constitution and

 SAILing Regulations-OF THE

# INTER-LAKE YACHTING ASSOCIATION. 

$$
1896 .
$$

Organized March 19th, 1894.

FRANK HEYER, PRINTER, TOLEDO, OHIO.

LIST OF YACHT CLUBS
belonging to
THE INTER-LAKE YACHTING ASSOCIATION.


## OFFICERS-I896

Commodore, GEO. H. WORTHINGTON

Vice-Commodore,
C. J. LIUHTENBERG.

Rear-Commodore, HENRY TRACY.
Fleet Captain,
GEO. T. BLISS.
Secretary-Treasurer, FRANK R. FREY.

Measurer, JOSEPH HEPBURN.

Fleet Surgeon,
G. D. STEWART

## DIRECTORS-1896

F. B. HOWER, HENRY LOOK,
E. W. RADDER,
c. J. LICHTENBERG,
S. H. JONES, GEO. T. BLISS, HENRY TRACY, GEO. H. BEEBE, GEO. R. WILLIAMS, F. R. FREY,

## RACECOMMITTEE

R. D. POTTER, W. G. BEAN, A. U. BETTS, .

Buffalo Yacht Club Citizens' Yachting 'Association Cleveland Yacht Club

Detroit Yacht Club
West End Yacht Club
Eric Yacht Club
Ohio Yacht Club Put-in-Bay Yacht Club Sandusky Yacht Club Toledo Yacht Club

OFFICERS SINCE ORGANIZATION

Commodores,

| GEORGE W. GARDNER, | C. Y. C. | 1894 |
| :--- | :--- | :--- |
|  | O. Y. C. | 1890 |

Vice Commodores.

| JOHN E. GUNCKEL, | O. Y. C. | 1894 |
| :---: | :---: | :---: |
| HARRY C. KENDALL, | C. Y. A. | 1895 |
| Rear Commodores, |  |  |
| H. C. KENDALL, | C. Y. A. | 1894 |
| J. J. GILL, | S. Y. C. | 1895 |
| Secretary-Treasurer, |  |  |
| E. W. RADDER, | C. Y. C. | 1894 |
| F. R. FREY, | T. Y. C. | 1895 |

## MEMORANDUM.

Commodore's Address,
GEO. H. WORTHINGTON, Cleveland, O. Secretary-Treasurer's Address,
F. R. FREY, 313 Monroe Street, Toledo, O.

Measurer's Address,
JOSEPH HEPBURN, Toledo, 0.
Race Committee, Chairman's Address,
R. D. POTTER, Toledo, 0 .

CONSTITUTION
OF THE

## Inter-Lake Yachting Association

## ARTICLE I.

Name.
The name of this body shall be "Inter-Lake Yachting Association."
obJECT.
The object of this Association shall be to advance yachting interests on the lakes and rivers.
oFFICERS.
One, Commodore; 2, Vice-Commodore; 3, Rear Commodore; 4, Fleet Captain; 5, Secretary-Treasurer; 6, Measurer; 7, Surgeon; 8, Board of Directors; 9, Race Committee.

## members.

Any organized Yacht Club on the lakes and rivers connecting therewith may become a member of this Association.

## APPLICATION.

Clubs desiring to become members, shall make writien application to the Secretary-Treasurer, who will bring it before the Board of Directors for action. Their decisica shall be final.

## GOVERNMENT.

The entire government and management of the Association shall be vested in a Board of Disfters, consisting o one representative from each member, a majorlty of whom shall constitute a quorum.

## ELECTIONS.

DIRECTORS.
Dlrectors are elected by each Association member, as they think best, in December of each year.

All Ex-Commodores of the I-L. Y. A. are ex-officio members of the Board of Directors, and shall have voice, but without vote, in all meetings of the Board of Directors.

## COMMODORES.

Nominations for the three Commodores shall be confined to the Commodores and ex-Commodores of the clubs in this Association. Their term of office shall be one year, and they cannot be elected to succeed themselves. A plurality vote of the Directors constitutes an election.

## OTHKR OFFICERS.

All other officers are elected by a plurality vote of the Directors, and may succeed themselves.

## voting.

Voting shall be by ballot.

## DUTIES.

## COMMODORE.

It shall be the duty of the Commodore to preside at all meetings of the Association, to take command of the squadron, and perform such other duties as the Board of Directors may appoint.

He shall call special meetings of the Board, whenever he shall deem it necessary, or on a written request of two Directors.

All requests to call meetings, and calls, shall specify the objects of the meeting, and no other matters than those specified shall be considered.

VICE-COMMODORE.
It shall be the duty of the Vice-Commodore to assist the Commodore in the discharge of his duties, and, in his absence, officiate in his stead.

## REAR-COMMODORE.

It shall be the duty of the Rear-Commodore to assist the Commodore and vice-Commodore in the discharge of theirduties, and in their absence, officiate in their stead.

The Fleet Captain shall assist the Commodore or the Acting Commodore in the discharge of his duties, and in his absence, officiate in his stead. He shall see that the squadron is in proper order when under way and report to the officer in command any infraction or disobedience to orders and rules, either while under way or at rendezvous.

## SWCRRK' ARY-TRFASURER.

It shall be the duty of the Secretary to keep a true record of the proceedings of all the meetings of the Board of Directors with the names of the members present thereat, in a book provided for that purpose, and to authenticate the same by his signature.

To keep a correct roll of all the Clubs and Directors. To notify every Club elect of its election, and upon its becoming a member, to furnish it with copies of the Constitution, ByLaws and Sailing Regulations of the Association. To notily every Director of each special and adjourned meeting, at least ten days prior thereto.

He shall conduct all offcial correspondence of he Association.

He shall be an ex-officio member of every committee, either elected or appointed.

He shall make all collections for the Association, and pay all bills which have been passed by the Board of Directors and approved by the Commodore, out of the funds of the Association.

He shall make quarterly report of all money in his hands, and a full detalled report at the annual meeting in February, of all receipts and disbursements.

He shall keep the accounts of the Association, and preserve proper vouchers for all payments.

To file all documents, records, reports and communications connected with the business of the Association.

To keep a correct list of the name, size, ownership, rig and builder of each yacht enrolled in the squadron, a copy of which list, corrected monthly he shall keep for inspection and mail to each Club semi-annually.

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The Secretary-Treasurer shall have voice, but without vote, in the proceedings of the annual meeting and other meetings of the I-L. Y. A., and the expense incurred by him through attending such meetings shall be paid from the funds of the I-L. Y. A.

## MEASURER.

It shall be the duty of the Measurer to make a correct list of the name, size, rig and measurement of each boat enrolled in the squadron, and deliver the same to the Secretary-Treasurer.

To make a similar return of each boat entered for any regatta to the Race Committee, not less than two hours prior to such regatta.

## FLEET SURGEON.

It shall be the duty of the Fleet Surgeon to look atter the physical condition of the members, and perform such other duties connected with his office, as the Commodore may direct.

## REGATTA COMMJTTEE.

1. The Regatta Committee shall consist of five members. They shall have direction and control of all races sailed under the auspices of the Association and shall make report to the Secretary-Treasurer in writting immediately after each race.
2. Any member of the Committee having an interest in any yacht entered for a race, shall be ineliglble to act in any capacity connected with such race, and the Committee shall have the power to flll such temporary vacancy.
3. They shall notify the owners of winning yachts, and shall have full charge of all matters pertaining to the procuring and awarding of prizes.
4. They shall appoint three persons who shall act as Judges of all races sailed by the Association, and who shall decide all questions of such races, and from whose decision there shall be no appeal.
5. They shall appoint two time keepers who shall act under direction of the Judges.

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6. They shall appoint a surveyor whose duties shall be to make an accurate survey of the course described by the Regatta Committee and report to them as soon as possible thereatter the true magnetic bearing of same. He shall also have charge of setting all work buoys, and stake boats.
7. They shall have power to disqualify with or without protest, a yacht that shall have violated any rule of the Assoclation, and to postpone any race should unfavorable weather render such action desirable.
8. They may engage the service of a competent person who shall assist in the clerical work of the Committee during the Association meet, at a fair compensation. Said compensation to be fixed by the Board of Drectors.
9. Whenever it occurs that through lack of wind it wiil be impossible for the yachts to finish the race in the prescribed time, the Regatta Committee may dectare the race finished when the yachts shail have sailed once over the course. Nothing shall, however, prevent the yachts from continuing on to finish, if, in their judgement, they can complete the course within the prescribed time. When the race is declared finished, after sailing once over the course, time shall determine from the moment the respective yachts finished the first half of the course.
10. The Regatta Committee shall have power to nill all temporary vacancles.

SAILING GROUNIS.
Sailing grounds must be selected from waters that will permit in all cases of a windward and leeward course, also a triangular course.

## AMFNDMENT TO THE CONSTITUTION.

No amendment or alteration of the Constitution shall be made except by a vote of three-fourths of the members present, and a resolution to that effect, setting forth the alteration proposed, shall have been before the Association for one previous meeting, and notice thereor given at such meeting by the chalrman, and ako notice given in the call for the meeting when such alteration shall beacted upon, that an alteration of the Constitution is on the table, and will be take, up.

# BY-LAWS <br> 11 <br> MEETINGS 

There snall be an annual meeting of Directors held on the second Wednesday of each February, and at other times to which it may be adjourned, at such place as may be decided upon at the previous meeting.

To hear the Secretary-Treasurer's report, to andit the same, and elect officers for the ensuing year $\cdot \therefore$

Special meetings may be called by the Commodore, as provided by the Constitution.

The notice of special meetings shall state the object thereof, and at such meetings none but stated business shall be in order.

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Directors may be represented at any meeting by proxy duly authorized in writing, but no Direstov, shall give a proxy to any person who is not a member in good standing of his own Club.

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\text { ORDER OF BUSİNESS }{ }_{\text {an }} \text {. . .. .. }
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The Commodore for in his absence the officer of highest rank present) shall take the chair, and call the meeting to order.
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The Secretary-Treasurer shall call the roll: Auruorum being present, the order of business shall be as folfows;

1. Keading the minutes of the previous meeting, which shall stand approved if not corrected.
2. Report of the Secretary-Treasurer.
3. Reports of committees.
4. Miscellaneous business.
5. Election of officers and members.
6. Adjournment.

## KULKS OF ORDFR.

Any Director wishing to speak, shall rise and address the chair. If two or more Directors shanl claim the floor at the same time, the chair shall decide who is entitled to it.

No motion may be entertained by the chair untrl seconded; and, until decided, nu other motion shall be in order, except for the previous question, to lay on the table, to amend, to re-commit, or to adjourn.

All motions and resolutions must be reduced to writing if required by any Director present.

When a question is put, every Director present must vote, unless personally interested or excused by the chair. No Director may move the reconsideration of any vote, unless he voted with the majority which decided the question.

Any Director may appeal to the Association from the decision of the chair, and if seconded, the question shall be: "Shall the decision of the chair be sustained."

No Director may speak more than twice upon the same question, without the permission of the meeting.

When the floor is not occupied a motion to adjoun is always in order, and is not debatable.

Any two Directors can call for the yeas and nays upon any debatable motion, and the Secretary-Treasurer shall call the names present and enroll the vote.

Any of the foregoing rules of order may be suspended at the regular or special meeting by a vote of two-thirds of the Directors present, but such suspension will terminate with the meeting.

Robert's Rules of Order shall be authority for the construction of the toregoing rules, and to decide disputed questions of order not herein provided.

## yachts eligible to race.

Each Cinb must furnish the Secretary-Treasurer with a list of yachts, in good standing giving full measurements of each (see sailing rules.)

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Yachts not on these lists cannot enter Association race. except on written order from the Secretary-Treasurer and countersigned by the Commodore in charge.

A yacht as defined by this Association must be a vessel of at least $16 \mathrm{ft} \mathrm{L.W}. \mathrm{L}$. lbs. of ballast permanently stowed or have a beam of not less than one-fifth of her load-line length. She must have standing rigging, a fixed mast, and must be kept permanently on the water during the season.

DUES.
The annual dues shall be $\$ 25.00$ in advance, payable on the date of the annual meeting.

If any Club shall be in arrears to the Association, the Secretary-Treasurer shall make report thereof to the Board of Directors, and notity such delinquent Club in writing, that unless the same shall be paid within thirty days, their privileges as a member shall cease.

## AMENDMENTS TO BY-LAWs.

These By-Laws may beamended at any regular or special meeting of the Association, by a vote of three-fourths of the Directors present.

## SAILING REGULATIONS

## RACING COMMITTEE

The Race Committee shall hare full charge of each regatta.

## ENTRIES.

Entries for all Association regattas shall be made in writing to the Secretary-Treasurer, twelve hours before the race, and no boat shall be entered for Association regattas unless it is enrolled in the Association squadron, and all dues of the Club to which she belongs are paid up. Every Sailing Master or Captain of any yacht entered for Association regattas, excepting those in first-class, 55 and 46 footers, must be a member in good standing of one of the Clubs of the Association.

The Secretary-Treasurer shall receive no entries unless accompanied by a complete measurement of the yacht desiring to enter, (in case of a yacht whose actual sail spread is to be measured, a diagrain to be furnished) properly signed by the managing owner and the official measurer of her home Club or the I-L. Y. A. These measurements must be reduced to feet and tenths of feet. Blanks can be obtained from the Secretary-Treasurer.

No new entries shall be received for a postponed race under any circumstances. Two boats in which a member is interested cannot compete for the same prize unless there are other entries. Every yacht must sail in her own class according to her measurement excepting the case of a yacht entered alone in her class, which yacht can enter the class above her by assuming the minimum measurement.

FEESS.
First-class, fifty-five and forty-six footers, shall pay an entrance fee of $\$ 3.00$.

Forty and thirty-five footers, shall pay $\$ 2.00$.
Thirty and twenty-five footers, shall pay $\$ 1.00$.

The fee shall be paid to the secretary-Treasurer when handing in entrance blanks.

The Race Committee shall not give out racing numbers except to members presenting the Secretary-Treasurer's receipt for entrance money.

## MEASURKMENTS.

The measurements of yachts shall be length and sail area, according to the formula:
L. W. L. plus the square root sail area, divided by two.

For system and time allowance see appendix.
In all classes, the number of yachts competing must exceed the number of prizes given.

## Classification.

First Class. -All yachts over 55 feet corrected length.
Fitty-five Footers.-All yachts over 46 feet and not over $5 \approx$ feet, corrected length.

Forty-six Footers.-All yachts over 40 teet and not over 46 feet, corrected length.

Forty Footers.-All yachts over 35 feet and not over 40 feet, corrected length.

Thirty-flve Footers.-All yachts over 30 feet and not over 35 feet, corrected length.

Thirty Footers. -All yachts over 25 feet and not over 30 feet, corrected length.

Twenty-five Footers. - All yachts of 25 feet, corrected length, and under.

> SIGNALS.

The Association signal shall be a swallowed-tailed pennant, in length not exceeding one and one-half inches to every foot in length of the deck, having a base two-thirds the extreme length of the pennant. It shall consist of a white field with blue border, the width of which shall be one-sixth of the base, and shall bear the letters "I-L. Y. A." in red thereon.

RACING NUMBER.
Each yacht, while sailing in a race, shall carry the number assigned it by the Racing Committee at the peak on the port.

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Each yacht may carry not to exceed one man for every five feet of corrected length, or fractional part thereot, including a Salling Master or Captain, but not a scrutineer.

In yachts of the first, 55 ft . and 46 ft . classes, a waiter, cook, and two guests or owners may be carried, who shall not assist in working the boat.

BALLAST.
Ballast shall not be trimmed or sbifted in any way from the time of the latest measurement until the day after the race; or in case of a protested measurement, no shifting or trimming in any way is permissible until such protest has been settled.

STARTING*AND FINISHING.
Each boat in starting shall pass between the stake boat and mark boat, leaving the stake boat to port. She shall leave all stake boats in the course to port, and shall finish by passing between the stake boat and mark boat without rounding up. All stake boats shall carry a large distinguishing flag. The mark boat shall carry a small pennant. At the first or preliminary gun a flag shall be set. After the elapse of ten minutes the starting gun shall be fired and the flag lowered. This gun shall be the signal for the ;largest class in the race to cross the starting line.

After the elapse of five minutes another gun shall be fired, which shall be the handicap gun for the flrst class, and the starting gun for the next class, and so on until all the classes have been started. Every yacht must cross the line within the five minutes allowed to her class, and failing to do so, she shall be timed from the handicapgun of her class. ANCHORING.
Any boat may anchor during a race, but must weigh anchor age in on starting.

## PROPELLING.

Sails are the only means permitted for propelling, and they shall not be limited in number or kind.

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SOUNDING.
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The ordinary hand lead and line only shall be used for sounding.

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## MEETING.

Boats going free must glve way to those on the wind. Boats on thestarb mart tack shall have the right of way. Boats meeting end on, or nearly end on, shall put their helm to port, so that each may pass tise other on the port slde.

OVERTAKING, ROUNDING, EFC.
A boat overtaking another shall keep out of his -way, and when two or more boats are rounding any buoy or stake boat, and in danger of fouling, each respective outside boat must give way, so as to allow the boat next inside to pass free of each object and all boats inside, whether the boats be lee or weather boats. Each boat in rounding any buoy, stake boat or other object marking the course must leave such object on the port side.

If any part of hull or spars of a competing yacht are on or across the ine before the signal to start is made, she must return and recross the line. The yacht so returning or working into position from the wrong side of the line after the signal to start has been made, must keep clear of all competing yachts.

## onstruction to sea room, etc.

When two or more boats are passing any pier, vessel, shore or other obstruction to sea room, and the inside boat or boats are in danger of being forced to foul, each respective outside boat must upon request, immediately give way and each boat a valling itself of the benefits of such request must forthwith bear away on a like course if it can be done without actual danger, whether such boats be lee or weather boats.

## LUFFING on beAring AWAy.

A boat may luft as she pleases to prevent another from passing to windward before an overlap has been established, but must not bear away to prevent the other from passing to leeward. The leeward slde shall be considered that on which the leading boat is carrying its mam boom, and the boat overtaking and passing must not lufr until it has passed clear ahead of the boat overtaken.

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## DLFANITON OF A OVERIAP.

An overlap is established when an overtaking yacht has nolonger a tree chobee on whieh side she will pass, and continnes to exist as long as the leeward sacht by luthog, or the weather yacht by bearhig away, is in danger of fouling.
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Fiach boat must fuirly round the course, and it must not toncin any buoy or other object used to mark the course; but no boat shall be disqualifled or forfeit its rlght or clalm in a'ty race if wrongithy conpelled to toul stach object by another bont. Shondi nay b sut, through negieet of any of these rules, foul another bat, or compel other boats to , foul such boat shall forfeit all chams to a prize.

## SCRUTINEERS.

The Race Committee reserves the right to place a scrutineer in each boat sailing in any regatta, and also to place a competent person in each stake boat to make observations, and such person or persons may be examined by the judges touching any information required.

## RIGit of way.

All Association boats not actually entered and saillng in a regatta, or after abandoning any race, shall give way to all boats sailing the race irrespective of all other rules.

## PENALTESS.

If any competing yacht calls for measurement, a fee of 10 cents per foot, corrected length, will be charged and must be deposited in advance, with the Secretary-Treasurer, the funds to go into the Association treasury. In case the two measurements disagree by an amount exceeding three inches, corrected length, the deposit shall be refunded to the owner of the yacht. Fach boat entering a regatta shalt be go rerned by the rules and regalations thereof, in all particulars, and any boat breaking any of the rules or regulations of the regatia shall forteit all chaims to a prize, and be fable for all damages that may oceur theremom.

## TIME.

Any regatta shall be declared off unless one yacht in the class of to feet ana upward, shath make the race ot the rate

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of not less than four natieal miles per hour, and of the 35 and 30 feet classes at the rate of not less than $31 / 2$ natical miles per hour and of the 25 feet class at the rate of not le:s than three nantical miles per hour; the course to designate the distance sailed.

> -TIMING

The tirne at the start and finish shall be taken when the point marked by the mainmast in all yachts crosses the line.

## PROTESTS.

Any boat desiring to enter a protest sha 1 present the same in writing, immediately after the conclusion of the race, to the judges, who shal the eupon hear and detimme the same. They shall ako notity the owner of the boat prr lested. And the judges shall, without protest, disqualify any boat, shonld they be satisfied that such boat or crew has disregarded any of the rules, but not, however, unt'l the owner or representative thereof shall have been given an opportunity of being hea: $d$. The decision of the judges shan be final in all cases.

ACCIDENIS.
Should by any accident, a man overboard, or a boat capsize, every boat must render all assistance possible, and if, in the opinion of the judges the result of the race is thereby changed, they shall order the race to be resailed.

> POSTPONFMENTS.

The Race Committee shall have the power to postpone races, should the weather render such action desirable and to determine what course shall be salled.

> - MAKE BOATS.

Should any flag, vessel or other mark be removed from its proper position, either by design or accident, the race shall be sailed over again, or not, at the discreti $n$ of the Race Committee.

## AMENDMENTS.

These sailing regulations may be amended at any meeting, by a two-third vote of the Directors present, provided notice of the proposed amendment has been given in the notice of the meeting.

## APPENDIX

## RULES OF MEASUREMENT AND TIME ALLOWANCE.

On cutters and sloops, a perpendicular line to be taken along the after-side of the mainmast, from the under-side of the gaff-topsail block or sheave on top-mast or uppermost block or sheave at masthead to the upper side of the boom, when resting on the sadale or on the lowest part of the gooneneck, the distance of which point from the main-deck or house-deck to be recorded by the measurer, together with the other points used in measurement.

A base the to be taken from the bee-hole or point of contact of the outer-most stay or bowsprit or jib-boom in a straight line to the end of the main boom, with the difference between 50 per cent of the length of top mast and the length of the gaff added thereto. Length of top mast to be taken from upper most sheave at top mast head to hounds, or in their absence to the top of throat halliard block. In measuring for the sail spread of schooners, it is understood that the main gaff and main topmast be measured. The base line shall not be lengthen by any devise whatever.

The excess in length of the spinnaker-boom, over the water-line length, to be added to the base-lme; and if the spinnaker-boom be arranged to ship on deck or in the rigging, or have any lengthening device whatever, the distance or length oi the same, from center of the mast, shall be included in the measurement.

Sprits on spinnakers are limited to $t$ wo feet in length. On cat-boats, the base line to be the length of boom plus three-quarters the length of the gaff. On schooners, yawls, double cats, unprovided for and uncertain rigs, the actual sail area inciuding top-sails, shall be taken, such actual sail area however, not to include that part of top-sail extending above the uppermost block or sheave at topmast head, or beyond the outer end of gaff.

To obtain area from these figures the usual formula for obtaining the area in square feet of a triangle is to be foilowed, namely: Buse multiplied by the perpendicular and divided by two.

Length to be measured from forward side of stem at the water-line to the water-line at the stern, wherever found
exclusive of rudder blade. This measurement to be made w ten the yacht is athoat and in her ordinary trim, and withont the crew on board. The measure at the time of taking his meaburement. to atiix a distinctive mark at each point. To the square root of the sail area, as ascertained, add the L. W. I, length as ascertained, divide the sum by two, and the result is the measurement for time allowance.

Any change in these measurements to be reported by the owners as customary, to the measurer.

RULES FOR ASCERTAINING ALLOWANCES.
To find the time one yacht alows another; subtract the time opposite the length of larger yacht from the time opposite the length of smaller yacht, and multiply the remain ler by the length of course, and the result is the allowance in seconds.

That schooners and yawls are to be rated at 85 per cent. and 93 per cent. respectively of their racing length and shall be classified after this reduction is made.

Any chatige in the rules of measurement and time allowance shall be subject to all the restrictions of change in the Constitution, as provided therein.

## TABLE OF TIME ALLOWANCE.

The allowances in this table are based upon the rule accepted by naval architects, that within economic limits opportunities for speed vary in different vessels as the square roots of their respective lengths. As strong winds are required, however, to give to larger vessels the full extent of their advantage in size, and as such a scale of allowance is not adapted to ordinary summer racing, 50 per cent. only of the allowance due to the rule is given in the table, and may be stated thus:

Time equals . $5\left\{\frac{3600}{\sqrt{1}}-\frac{3600}{\sqrt{L}}\right\} ; 3,600$ representing
the number of seconds in an hour, 1 the smaller yacht and $L$ the larger one. Practically the formula is $\left\{\frac{1800}{\sqrt{ } 1}-\frac{1800}{\sqrt{L}}\right\}$ $5-10$ ths of 3,600 being 1,800 .

## RULES FOR USING THE TABLE.

The figures to be found in the table show in seconds and hundredths of a second what a yacht of the measurement opposite to these flgures would be allowed by one 130 feet in salling one nautical mile. To find what a yacht of any measurement shall receive from a larger one, take the figures to be found opposite to the smaller measurement; from these subtract the figures opposite to the measurement of the larger yacht, and the difference multiplied by the number of nantical miles in the course will give the amount of the allowance due to the smaller vessel, in seconds and hundredths of a stcond.

EXAMPLE.
What time will a yacht of 39 feet racing length have to allow to one of 36.7 feet racing leugth in a course of 20 natical miles?
The time opposite 36.7 feet is ......................................... 139.26 " 439 . 39 ....................................... 130.37

Allowance .......................... .................................. ........ 177.80
Or 2 minutes $57 \pm .5$ seconds.

$$
-22-
$$

For part of a foot use the nearest fraction that can be expressed in hundredths，and take its proportion of the dif－ ference shown in the table between the time stated opposite to the flgure to which the fraction is attached and the next higher number．

1．XAMPLE．
What time will a yacht of 30 feet have to allow one of 25.86 feet on a course of 30 natutical miles？
Ditference $\qquad$ 25.9 ＂．
$\qquad$ I96．51 The time opposite 258 feet is 1958
$\qquad$ ．．．．．．．．．．．．．．． .68 .272
4－10ths of difference $\qquad$
$\qquad$ 196.102

Time for 25.86 feet for one natical mille $\qquad$ 170.7

Number of seeonds yacht 30 feet allows yacht $\mathbf{2 5} .86$ feet for one mile．

Or 12 minutes $3996-100$ th seconds．

Time Allowance for One Nantical Mile
in SECONDS AND DECIMALS．

|  | 電 |  | $\begin{aligned} & \text { 足 } \\ & \text { 를 } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { 家 } \\ & \text { 总 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16. | 29211 | 20. | 211.62 | 24. | 209.56 | 28. | 1N2．00 |
| ． 1 | 29076 | 1 | 248.12 | ． 1 | 208．80 | ． 1 | 181.69 |
| .2 | $2 \times 9+2$ | ． 2 | 21263 | .2 | 208.04 | ． 2 | 181．09 |
| ． 3 | 2 Sx 08 | 3 | 24114 | 3 | 207．28 | ． 3 | 180.44 |
| ． 4 | 283.73 | 4 | 2.10 （6） | ． 4 | 206.23 | 4 | 178．89 |
| ． 5 | $2 \times 5: 9$ | 5 | 239.69 | ． 5 | $=05.79$ | ． 5 | 179.80 |
| ． 6 | 23： 05 | ． 6 | $298 .: 2$ | ． 6 | 205.05 | ． 6 | 178.71 |
| .7 | 252．70 | .7 | 237.76 | ． 7 | 201.82 | .7 | 178.12 |
| ． 8 | 281.36 | ． 8 | 23.81 | ． 8 | 203．09 | ． 8 | 1754 |
| ． 9 | 280 02 | 9 | $2: 5.86$ | ． 9 | 202.86 | .9 | 17696 |
| 17. | 278.68 | 21. | 23192 | 25. | 202.14 | 29 | 176．．3s |
| ． 1 | 277．44 | ． 1 | 233．59 | ． 1 | 20142 | 1 | 175.81 |
| ． 2 | 27621 | ． 2 | 23，．07 | ． 2 | 200.70 | ． 2 | 175.24 |
| ． 3 | 27497 | ． 3 | 232．：4 | 3 | 199.99 | ． 3 | 174.67 |
| ． 4 | 273.74 | ． 4 | 2\％1．38 | ． 4 | 199.29 | ． 4 | 17410 |
| ． 5 | 272.51 | ． 5 | $20 .: 3$ | ． 5 | 195．59 | ． 5 | 172．54 |
| ． 6 | 271.27 | ． 6 | 22939 | ． 6 | 1978 | ． 6 | 172.98 |
| ． 7 | 27004 | 7 | 2：8．54 | ． 7 | 19720 | ． 7 | 172.42 |
| ． 8 | $26 \times 80$ | ． 8 | 227.65 | ． 8 | 19651 | ＇8 | 171.87 |
| .9 | 267.57 | ．9 | 226．77 | ． 9 | 195.83 | ． 9 | 171.32 |
| 18. | 266.84 | 22. | 22； 89 | 26. | 195.15 | 30. | 170.77 |
| ． 1 | 25.21 | ． 1 | 22， 02 | ． 1 | 19147 | ． 1 | 170.22 |
| ． 2 | 264.08 | ．2 | 224.16 | ． 2 | 193.79 | .2 | 169.68 |
| ． 3 | 2 y \％ 0 | ． 3 | 223：80 | ． 3 | 193.12 | .3 | 16： 14 |
| .4 | 2618 | ． 4 | 92245 | ． 4 | 192.45 | ． 4 | 118.60 |
| ． 5 | 260.69 | ． 5 | 221.10 | ． 5 | 191.79 | ． 5 | 168.06 |
| ． 6 | 25956 | ． 6 | 220.76 | ． 6 | 191.14 | ． 6 | 167．5\％ |
| ． 7 | 238.43 | ． 7 | 219.93 | ． 7 | 190． 8 | ． 7 | 167．00 |
| ． 8 | $25 i .80$ | ． 8 | 219.10 | ． 8 | 189.83 | ． 8 | 166.48 |
| .9 | 256.17 | .9 | 218.28 | ． 9 | 189.18 | ． 9 | 165.96 |
| 19. | 255.05 | 23. | 217.46 | 27. | 188.54 | 31. | 165.44 |
| ． 1 | $2 \mathrm{E}+1.00$ | ． 1 | 216.65 | ． 1 | 15790 | .1 | 164.92 |
| ． 2 | 252.96 | 2 | 215.81 | ． 2 | 187.26 | 2 | 164.40 |
| ． 3 | 251.92 | ． 3 | 21504 | ． 3 | 18668 | ． 3 | 168.88 |
| ． 4 | 25087 | ． 4 | 214.24 | ． 4 | 186.00 | ． 4 | 163.36 |
| ． 5 | 249.83 | ． 5 | 213.45 | ． 5 | 18537 | ． 5 | 162.85 |
| ． 6 | 218.79 | ． 6 | 21266 | ． 6 | 154．75 | ． 6 | 152．84 |
| .7 | 217.74 | 7 | 211.88 | ． 7 | 181．13 | ． 7 | 161.83 |
| ． 8 | 216.70 | 8 | 211.10 | ． 8 | 18：3 52 | ． 8 | 181.33 |
| ． 9 | 245.66 | ． 9 | 210.33 | ． 9 | 182．91 | ． 9 | 160.89 |

Time Allowance－Continued．

|  |  |  |  |  | 安 | ${\underset{c}{c}}_{\substack{2}}^{=}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 160.34 | 36. | 142．14 | 40. | 126.75 | 44. | 11350 |
| － 8.1 | 1.914 | ${ }^{\text {a }}$ ． 1 | 141.72 | ． 1 | 126.39 | ． 1 | 11319 |
| $\stackrel{1}{2}$ | 159）： 11 | ． 2 | 111.30 | 2 | 12603 | 2 | 112.28 |
| ． 3 | 158.85 | ． 3 | 110.89 | 3 | 12.67 | 3 | 112．67 |
| 4 | 1.38 .30 | 4 | 140.48 | ． 4 | 12.82 | ． 4 | 112.27 |
| ． 5 | $157 . \times 7$ | ． 5 | 140.07 | ． 5 | 124.97 | ． 6 | 111.66 |
| ． 6 | 157.28 | ． 6 | 139.66 | ． 6 | 121.62 | ． 6 | 11166 |
| .7 | 151540 | ． 7 | 139.26 | ． 7 | 124.25 | ． 7 | 111.6 |
| ． 8 | 154.48 | ． 8 | 138.86 | ． 8 | 123 93 | ． 8 | 111.06 |
| ． 9 | 15596 | ． 9 | 138.46 | ． 9 | 12：3．59 | ． 9 | 110.16 |
| 33. | 15．3．49 | 87. | 138．06 | 41. | 123．25 | 45. | 110.47 |
| ． 1 | 15501 | ${ }^{37} .1$ | 137.66 | ． 1 | 122.10 | ． 1 | 110.17 |
| ． 2 | 154.53 | ． 2 | 137.26 | ． 2 | $1 \geqslant 2.56$ | ． 2 | 109.67 |
| ． 3 | 151.06 | ． 8 | 136.86 | ． 3 | 129 22 | ． 8 | 109.57 |
| ． 4 | 153.59 | ． 4 | 136.46 | ． 4 | 121.88 | 4 | 109.27 |
| ． 5 | 153， 12 | ． 5 | 133607 | ． 5 | 121.54 | ． 5 | 108．9\％ |
| ． 6 | 1.52 .66 | ． 6 | 135 $6 \times$ | ． 6 | 120.87 | ． 7 | 108．29 |
| ． 7 | 15220 | ． 7 | 185．29 | .8 | 120.84 | ． 8 | 108.10 |
| ．8 | 151.74 | ． 8 | 184.90 $134 . \overline{2} 2$ | ． 9 | 120.54 120.21 | ． 9 | 107.82 |
| ． | 151 |  |  |  |  |  |  |
| 34. | 150.81 | 38. | 184．14 | 42. | 119.89 | 46. | 107.54 |
| ${ }^{3}$. | 150.8 s | .1 | 1338.75 | ． 1 | 119.05 | .1 | 107.25 |
| ． 2 | 14993 | ． 2 | 1.33 .37 | $\therefore$ | 119.22 | ． 2 | 106.96 |
| ． 3 | 14945 | ． 3 | 182.99 | ． 3 | 118.89 | ． 3 | 1066 |
| ． 4 | 149.03 | ． 4 | 132.61 | ． 4 | 11s 56 | ． 4 | 106.58 |
| ． 5 | 1458 | ． 5 | $1: 32.23$ | ． 5 | 115．23 | ． 5 | 106.09 |
| ． 6 | 118.14 | ． 6 | 131．85 | ． 6 | 117.91 | ． 6 | 105.80 |
| .7 | 147.70 | ． 7 | 131.47 | ． 7 | 117.59 | ． 7 | 10552 |
| ． 8 | 117.26 | ． 8 | 131.10 | ． 8 | 117.27 | ． 8 | 100.24 104.97 |
| ． 9 | 14653 | ． 9 | 130.73 | ． 9 | 116．9） | ． 9 | 104.97 |
| 35. | 146.20 | 39. | 130.87 | 43. | 116．64 | 47. | 104．70 |
| ． 1 | 15.96 | ． 1 | 130.00 | ． 1 | 116.82 | .1 | 104.42 |
| ． 2 | 15.58 | 2 | 129.63 | ． 2 | 116.00 | .2 | 104．1 |
| ． 3 | 14510 | ． 8 | 129．26 | .3 | 11508 | .3 | 10： 21 |
| ． 4 | 144.67 | ． 4 | $12 \times 69$ | ． 4 | 115.36 | － 1 | 10：3．64 |
| ． 5 | 14.24 | ． 5 | 12s53 | .5 | $115.0 \pm$ | 5 | $10: 3.3$ |
| ． 6 | 12：3．81 | ． 6 | 128.17 | ． 6 | 114.73 | ． 6 | 103.0 |
| ． 7 | 143．89 | ． 7 | 127.81 | ． 7 | 114.42 | ．7 | 102.7 102 102 |
| ． 8 | 112.97 | ． 8 | 12745 | ． 8 | 114.11 | ． 8 | 102. |
| ． 9 | 142，－57 | ．9 | 127.10 | ． | 113.81 | ． 7 | 102 |

TIME ALLOWANCE－CONTINVED．

|  |  |  | $\begin{aligned} & \frac{1}{2} \dot{8} \\ & \frac{0}{3} \\ & \underset{y}{4} \end{aligned}$ |  | $\begin{aligned} & \text { 呂 } \\ & \text { 关 } \\ & \hline \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 48. | 10195 | 52. | 9176 | 56. | 8267 | ． | 7452 |
| ． 1 | 101.67 | ． 1 | 91.51 | ． 1 | 82.45 | ． 1 | 74.32 |
| ． 2 | 101.40 | ． 2 | 91.27 | ． 2 | 82.23 | ， 2 | 74，12 |
| ． 3 | 111.13 | ． 3 | 91.08 | ． 3 | 8202 | 8 | 78.93 |
| ． 4 | $100<6$ | 4 | $90.7)$ | ． 4 | 8181 | ． 4 | 73， 74 |
| ． 5 | 100.59 | 5 | 90.55 | ． 5 | 81．59 | ． 5 | 73，55 |
| ． 6 | 10.832 | ． 6 | 9）：31 | ． 6 | 81，38 | ． 6 | 73.36 |
| 7 | 10006 | ． 7 | 9108 | ． 7 | 8117 | ． 7 | 73.17 |
| ． 8 | （m） 81 | ． 8 | $\times 9.85$ | ． 8 | s0．96 | ． 8 | 7：98 |
| ． 9 | 9955 | ． 9 | 89.62 | ． 9 | 8076 | ．9 | 72.79 |
| 19. | 99.29 | 53. | 89.39 | 57. | 8056 | 61. | 7961 |
| ． 1 | 99.02 | ． 1 | 89.15 | ． 1 | 80.331 | ． 1 | 7242 |
| ． 2 | 98.75 | ． 2 | 8 8 91 | ． 2 | 8）．13 | ． 2 | 72.23 |
| ． 3 | 98.69 | ． 3 | $851: 8$ | ． 3 | 7992 | ． 3 | 72.04 |
| ． 4 | 98.23 | ． 4 | 85 | ． 4 | 79.71 | 4 | 71.85 |
| ． 5 | 9797 | .5 | 8822 | .5 | 79.50 | ． 5 | 7166 |
| ． 6 | 97.71 | ． 6 | $8: .99$ | ． 6 | 79：30 | ． 15 | 71.47 |
| ． 7 | 97.46 | ． 7 | 8776 | ． 7 | 79.10 | ． 7 | 71.28 |
| 8 | 9720 | ． 8 | 8753 | ． 8 | 75.90 | ． 8 | 71.10 |
| ． 9 | 96.95 | ． 9 | 87.31 | ． 9 | 7570 | ． 9 | 70.92 |
| 50. | 96.70 | 54. | 87.09 | 58. | 78.50 | 62. | 70.74 |
| ． 1 | 9 9． 41 | ． 1 | 8586 | .1 | 78.29 | ． 1 | 70.55 |
| ． 2 | 9618 | ． 2 | 8.93 | ． 2 | 78.08 | .2 | 70.36 |
| ． 3 | 95.93 | ． 3 | 84.40 | ． 3 | 77.87 | ． 3 | 70.17 |
| ． 4 | 9.9 .68 | ． 4 | 86.18 | ． 4 | 77.67 | ． 4 | 69.99 |
| ． 5 | 05.42 | ． 5 | 8.5 .95 | ． 5 | 77.47 | ． 5 | 69.81 |
| 6 | 95.17 | ． 6 | 85.73 | ． 6 | 77.27 | ． 6 | 69，住3 |
| 7 | $9+92$ | ． 7 | 8357 | ． 7 | 77.0 ¢ | ． 7 | 69.45 |
| 8 | 9467 | ． 8 | 8529 | ． 8 | 76.57 | ． 8 | 69.27 |
| ． 9 | 9413 | ． 9 | $\times 5.07$ | ．9 | 76.68 | ． 9 | 69.09 |
| 51. | $9+19$ | 55. | 8185 | 69. | 76.49 | 63. | 68.92 |
| ． 1 | 9；9t | ． 1 | S163 | ． 1 | 76．28 | ． 1 | 68．73 |
| ． 2 | 93.69 | 2 | Sl． 11 | .2 | 7608 | 2 | 68.55 |
| ． 3 | $9: .44$ | ． 3 | 81.19 | .3 | 75.88 | ， 3 | 68.37 |
| ． 4 | 9320 | ． 4 | 83.96 | ． 4 | 75.69 | ． 4 | 68.19 |
| ． 5 | 92.95 | ． 5 | 8375 | ． 5 | 75.18 | ． 5 | 6s． 01 |
| ． 6 | 92.71 | ． 6 | 83.53 | ． 6 | 75.28 | ． 6 | 67.84 |
| ． 7 | 92.47 | ． 7 | 83，31 | ． 7 | 75.09 | ． 7 | 67.66 |
| ． 8 | 92，溶 | ． 8 | 8309 | ． 8 | 74.99 | ． 8 | 67.48 |
| ，9 | 92.09 | ． 9 | 22.88 | ． 9 | 7＋．71 | ． 9 | 67.31 |

Time Amionance－Continued．

|  |  |  | $\begin{aligned} & \dot{c} \\ & \frac{1}{4} \\ & \end{aligned}$ |  |  |  | $\begin{aligned} & \text { 家 } \\ & \text { c } \\ & \underset{y}{3} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64. | 67.14 | 68. | 60.42 | 72. | 54.27 | 76. | 48.61 |
| ${ }^{61} 1$ | 6696 | ${ }^{6} .1$ | 60.25 | ． 1 | 54.12 | .1 | 48.47 |
| .1 | 66.78 | ． 2 | 60.09 | .2 | 53.47 | 2 | 48.33 |
| ． 3 | 66．60 | ． 3 | 59.98 | ． 3 | 5382 | ． 3 | 48.19 |
| .4 | 66.43 | 4 | 59.77 | ． 4 | 53.67 | ． 4 | 48.06 |
| ． 5 | 6626 | .5 | 59.61 | .5 | 53.28 | ． 5 | 47.93 |
| ． 6 | 68.08 | ． 6 | 59.45 | ． 6 | 53．88 | ． 6 | 47.80 |
| ． 7 | 65.91 | ． 7 | 69.29 | ． 7 | 53.23 | ． 7 | 4.66 |
| ． 8 | 65.74 | 8 | 59.14 | ． 8 | 5：3．09 | ． 8 | 47.53 |
| ． 9 | 65.57 | ． 9 | 58.49 | ． 9 | 5295 | ． 9 | 4.10 |
| 65. | 65． 40 | 69. | 58.84 | 73. | 52.81 | 77. | 47.27 |
| 00.1 | 85.22 | ${ }^{1} 1$ | 58.68 | ． 1 | 5266 | ． 1 | 47.13 |
|  | 65.05 | ． 2 | 5 5 .52 | .2 | 52.51 | ． 2 | 46.99 |
| ． 8 | 64.88 | ． 3 | $5 \mathrm{~s}: 6$ | ． 3 | 52.87 | ． 8 | 46.86 |
| ． 4 | 64.71 | ． 4 | 5820 | ． 4 | 52.23 | ． 4 | 46.73 |
| ． 5 | 6454 | .5 | 58.04 | ． 5 | 6209 | 5 | 46.60 |
| ． 6 | 64.87 | ． 6 | 5789 | ． 6 | 5197 | ． 6 | 45.47 |
| ． 7 | 64.20 | .7 | 57.74 | ． 7 | 51.81 | ． 7 | 46.34 |
| ． 8 | 64．03 | ． 8 | 57.59 | 8 | 51.67 | ． 8 | 46.21 46.08 |
| ． 9 | 6387 | .9 | 57.44 | ． 9 | 51.03 | ${ }^{9}$ | 46.00 |
|  | 63.71 | 70. | 57.29 | 74. | 51.39 | 78. | 45.95 |
| 66.1 | 63.7 | ． 1 | 57.13 | ． 1 | 51.24 | .1 | 45.81 |
| .2 | 63.37 | ． 2 | 5697 | .2 | 5109 | 2 | 45.68 |
| ． 8 | （63） 20 | ． 8 | 5681 | ． 8 | 50.95 | ． 8 | 45.55 |
| ． 4 | 63．0：； | ． 4 | 5666 | ． 4 | 5081 | .4 | 45.49 |
| .5 | 62.86 | ． 5 | \％6．51 | ． 5 | 50.67 | ． 5 | 45.29 |
| ． 6 | 62.69 | ． 6 | 56，：6 | ． 6 | 50．5：3 | ． 6 | 4516 |
| ． 7 | 62．53 | ． 7 | 56.21 | $\ldots$ | 50：9 | ． 8 | 45.12 |
| ． 8 | 62.37 | ． 5 | 56.06 | ． 8 | 50.25 | ． 8 | 44.90 |
| ． 9 | 62.21 | ． 9 | 5591 | ． 9 | 50.12 | ． 9 | 4.75 |
|  |  | 71. | 5576 | 75. | 49.99 | 79. | 44，66 |
| 67． 1 | 62.09 61.88 | 1.1 | 35．60 | ${ }^{18}$ | 49.85 | ． 1 | 4458 |
| . | 61.71 | .2 | 55.45 | .2 | 49.71 | ． 2 | $44 \stackrel{4}{27}$ |
| .3 | 61.04 | ． 8 | 55.20 | ． 8 | 49.57 | ． 3 | 44.27 |
| ． 4 | 61.88 | ． 4 | 55.15 | .4 | 4943 | ． 4 | 44.14 |
| .5 | 61.22 | ． 5 | 5500 | ． 5 | 49.23 | ． 5 | 44.01 |
| .6 | 61.06 | ． 6 | 54.85 | ． 6 | 49.15 | .6 | 43.2 |
| ． 7 | 60.90 | .7 | 54.70 | ． 7 | 49.01 48.87 | ． 8 | 43.6 |
| ． 8 | 60.74 | ． 8 | 54.55 | ．8 | 48.87 .48 .74 | ． 9 | 43.5 |
| ． 9 | 6058 | ． 9 | 54.41 | .9 | 45.74 | ． | 4.5 |

Time Ahlowance－Continued．

|  | 产 | 品 | 宅 | 㟥 | $\begin{aligned} & \text { 产 } \\ & \frac{0}{3} \end{aligned}$ | 新 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| s0． | 43.39 | 84. | 38.52 | 8 | 31.01 | ， | 29.79 |
| ． 1 | 43，26 | ． | 38.10 |  | 33.100 | ． 1 | 2918 |
| ． 2 | 43.13 | ． 2 | 38.28 | ． 2 | 3.3 .79 | ． 2 | 29157 |
| .3 | 43.09 | ． 3 | 38.16 | 3 | 33.68 | ． 3 | 29.47 |
| ． 4 | 42.87 | 4 | 38.01 | 4 | 33.57 | 4 | 29.27 |
| 5 | 42.75 | 5 | 3762 | ． 5 | 33.46 | ． 5 | 29.27 |
| ． 6 | 42.62 | ． 6 | 3780 | ． 6 | 33：35 | ． 6 | $\stackrel{29.17}{0.17}$ |
| ． 7 | 42.50 | 7 | 8769 | ． 7 | 3.3 .24 | ． 7 | ${ }^{2} \cdot 0.07$ |
| ． 8 | 4 ） 38 | ． 8 | \％ | ． 8 | 33.13 | ． 8 | $\stackrel{28.97}{ }$ |
| ． 9 | 4226 | 9 | 37.47 | ． 9 | 33.02 | ． 9 | 28．87 |
| 81. | 42.14 | 85. | ：37．36 | 89. | 32.92 | 3 | 2877 |
|  | d201 | ． 1 | 37：24 | ． 1 | 3281 | ． 1 | 28.67 |
| ． 2 | 41.88 | $\therefore$ | 37.12 | $\therefore$ | 32.70 | .2 | 25.57 |
| ． 3 | 41.6 | ． 8 | 87.00 | 3 | 3259 | ． 3 | ${ }^{28.47}$ |
| ． 4 | 41.63 | ． 4 | 36.85 | ． 4 | 3218 | ． 4 | 2837 |
| ． 5 | 41.51 | ． 5 | 36.77 | ． 5 | 32.87 | ． 5 | $2 \times .27$ |
| ． 6 | 41.89 | ． 6 | 3 c .66 | ． 6 | 32.26 | ． 6 | $2 \mathrm{2S}, 17$ |
| ． 7 | 41.7 | ． 7 | 3653 | ． 7 | 32.16 | ． 7 | 2 S 07 |
| ． 8 | 41.15 | ． 8 | 36.41 | ． 8 | 32.06 | 8 | 27.97 |
| ． 9 | 41.03 | ． 9 | 36.3 | ． 9 | 31.96 | ． 9 | 27.88 |
| 82. | 40.91 | 86. | 36.22 | 90. | 8186 | 94. | 27.79 |
| ． 1 | ＋0．78 | ． 1 | 3610 | .1 | 31.75 | .1 | 27.69 |
| $\therefore$ | 4086 | $\therefore$ | 35.99 | .2 | 31.64 |  | 27.59 |
| 3 | 9051 | 3 | 35．88 | ． 3 | 3158 | ． 3 | 27.49 |
| ． 1 | 10.42 | ． 1 | 3 76 | 4 | 3142 | 4 | 27.8 |
| ．） | 41：0 | ．） | 33．66 | ． 5 | 31.82 | ． 5 | 27.29 |
| ． 1 | 191\％ | ． 6 | \％is | ． 1 | 31.22 | 6 | 27.19 |
| ． 7 | $4{ }^{4}$ | ． 7 | ：5．44 | ． 7 | 81.12 | .7 | $\cdots$ |
| ． 8 | \％ 9 | ． 8 | ： 5 | 8 | 31.02 | ． | 26.99 |
| ． 9 | ：98．8： | ． 9 | ：5．22 | ． 9 | ：30．92 | ． 9 | 26.89 |
| 83. | 89.70 | 87. | $\bigcirc 511$ | 31. | 3089 | 95. | 26.80 |
| ． 1 | 39.58 | ． 1 | 33．00 | ． 1 | 3071 | ． 1 | 26：00 |
| .2 | 39.16 | ． 2 | 34.88 | $\therefore$ | 30.60 | 2 | 26.60 |
| 3 | 39.34 | ． 3 | 314 | ． 3 | 30.49 | ． 3 | 26.50 |
| 4 | 3322 | ． 4 | 3167 | ． 4 | $30: 9$ | 4 | 26.40 |
| 5 | 29.10 | 5 | 318 | ． 5 | $30: 9$ | ． 5 | 26.30 |
| 6 | 3s 98 | 6 | 34.45 | ． 6 | 3019 | ． 6 | 2620 |
| 7 | ：384 | ． 7 | 34.34 | ． 7 | 20．09 | ． 7 | 26.11 |
| ． 8 | ：3．\％1 | ． 8 | 31．2： | ． 8 | 2993 | ． 8 | 2602 |
| ． 9 | 38：63 | ． 9 | 34.12 | ． 9 | 29.59 | ． 9 | 25.93 |

Time Allowance－Continued．

| 幾总 | 采 | 号 | 关 | 关 | 象 |  | 产宅 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{96 .} 1$ | 2） 81 | 100. | $\frac{20.12}{2.63}$ | 104. | 18 <br> 18.59 <br> 159 | 108. | 15.34 |
| ． 1 | 25．74 | $\stackrel{1}{2}$ | 20．63 | ． 2 | 15.56 | ． 2 | 15.18 |
| ． 8 | 23.5 | ． | 215 | ． | 1s：37 | 8 | 15.10 |
| 4 | 23.11 | 4 | － 76 | ． 4 | 15.3 | ． 4 | 15.62 |
| ． 5 | 25.34 | ． 5 | 21.68 | ． 5 | 18.19 | ． 5 | 14.94 |
| ． 6 | 25.25 | ． 6 | 21.58 | ． 6 | 18.11 | ． 6 | 1488 |
| ． 7 | ${ }^{2} 516$ | ． 7 | 21.49 | .7 | 12.03 | ． 7 | 14.78 |
| ． 8 | 23.07 | ． 8 | 21．10 | ． 8 | 17.4 | ． 9 | 14.70 14.62 |
| ． 9 | 21.98 | ． 9 | 21.32 | ． | 17．87 |  |  |
|  | 21.89 | 101. | 21.21 | 105. | 17.59 | 109. | 14.54 |
| 9． 1 | 24.79 |  | 21.15 | ． 1 | 17.70 | ． 1 | 14.46 |
| ． 2 | 24.69 | 2 | 21.06 | ． 2 | 17.61 | － | 14.38 |
| ． 3 | 21.59 | ． 3 | 20，97 | ． 3 | 17.59 | .3 | 14.30 |
| － | 24.50 | .4 | 20.88 | ． 4 | 17.4 | $\cdot 4$ | 1422 |
| ． 5 | 24.11 | ． 5 | 2） 79 | ． 5 | 17：36 | ． 5 | 11.14 |
| ． 6 | 21.82 | ． 6 | 2.70 | ． 6 | 17.28 | $\underline{6}$ | 11.06 |
| ． 7 | 21.23 | ． 4 | 2） 61 | ． 7 | 17.20 | .7 | 18.90 |
| ． 8 | $\stackrel{21.11}{24.03}$ | ． 9 | $\frac{215}{20}$ | ． 9 | 17.01 | ．9 | 82 |
|  |  |  |  |  |  |  |  |
| 98. | 23.96 | 102. | 20.35 | 106. | 16.96 | 110. | ${ }_{13.67}^{13.75}$ |
| .1 | ${ }_{23}^{23.86}$ | ． 1 | $\frac{2126}{21.17}$ | ． 2 | 16.8 | ． 2 | 13．59 |
| 3 | 23，67 | ． 3 | 2008 | ． 3 | 16.70 | .3 | 13.51 |
| ． 4 | 23.58 | ． 4 | 19193 | ． 4 | 16．6．2 | ． 4 | 13.43 |
| .5 | 93．49 | ． 5 | 1990 | ． 5 | 16.51 | ． 5 | 11．33 |
| ． 6 | 23.40 | ． 6 | 151.21 | ． 6 | 16.46 | ． 6 | $1: 97$ |
| .7 | 23.31 | ． 7 | 1973 | .7 | 16．：8 | ． 7 | 1．151 |
| ． 8 | 23.23 | 9 | 198 | ． 8 | ${ }_{1620}^{16.30}$ | ． 8 | 13.04 |
| ． 9 | 23，13 | ． 9 | 19.54 | .9 | 16.22 | ． 9 | 13.01 |
|  |  | 103． | 19.9 | 107. | 16.14 | 111. | 12.97 |
|  | 22.91 |  | 1：3．40 |  | 16.06 | 1 | $12 \times 9$ |
| .2 | 2281 | 2 | $19: 31$ | $\stackrel{2}{2}$ | 15.98 | $\stackrel{.}{3}$ | 12.81 |
| ． 3 | 22．75 | 8 | 1922 | 3 | 1519 $15 \times 3$ | $\stackrel{.}{4}$ | 12.63 |
| ． 4 | 22.65 | ． 4 | 19.13 | 4 | 1.5 | ． 5 | 12.5 |
| ． 5 | 2023 | 5 | 1901 |  | $15 \%$ | ． 6 | 12.4 |
| ． 7 | \％24， | ． 7 | 18， | 9 | －15．5s | .7 | 12.42 |
| ．8 | 22.20 | ．88 | 1心，\％ | ． 8 | －15．50 | ． 8 | 12：25 |
| ． 9 | 22.21 | ． 9 | 1N．： | ． 9 | 15.42 | ． 9 | 12．28 |

Thme allowance－Continted．

|  | 商宅会 |  | 产 | 边 | 言 | 采 | $\begin{aligned} & \text { 兑 } \\ & \text { = } \\ & \text { 4 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 112. | 12.21 | 116. | 9.25 | 120. | 645 | 124. | 8.77 |
| ． 1 | 1213 |  | 9.17 | ． 1 | 6 \％ | ． 1 | 3.70 |
| .2 | 12.05 | ． 2 | 910 | ． 2 | 6.31 | ． 2 | 3.63 |
| ． | 11.97 | ． 3 | 9.03 | .3 | 6.21 | 3 | 3.56 |
| 4 | 11.59 | 4 | 8.96 | ． | 6.17 | ． 4 | ： 49 |
| .5 | 11.81 | ． 5 | 889 | ． 5 | 6.10 | ． 5 | 3.42 |
| ． 6 | 11．74 | ． 6 | 8.82 | ． 6 | ${ }^{6.03}$ | $\therefore$ | ：$\because 6$ |
| ． 7 | 11.67 | ． 7 | 875 | ． 7 | 5115 | ． 7 | ： 8.0 |
| ． 8 | 11.60 | ． 8 | 8.68 | ． | 5.89 | s | 3.4 |
| ． 9 | 11.53 | ． 9 | 8.61 | ． 9 | ¢．＞2 | ． 8 | 3.18 |
| 113. | 11.46 | 117. | 854 | 121. | 5.75 | 125. | 312 |
|  | 11，38 |  | 8.47 | ． 1 | 5.19 |  | 305 |
| .2 | 11.30 | ． 2 | 8.10 | ． 2 | 5.132 | ． 2 | 2.91 N |
| ． 3 | 11.22 | .3 | 8.33 | ． 3 | 5.5 | 3 | 2.91 |
| ． 4 | 11.14 | ． 4 | 8.26 | ． 4 | 5 18 | 4 | 285 |
| .5 | 11.06 | ． 5 | 819 | ． 5 | 511 | ． 5 | 2.79 |
| ． 6 | 10.99 | ． 6 | 8.12 | ． 6 | $5: 4$ | ． 6 | 2.73 |
| .7 | 10.92 | ． 7 | 8.05 | ． 7 | 5.23 | .7 | 2.67 |
| ． 8 | 10．85 | ． 8 | 798 | ． 8 | 5.2 | ． 8 | 2.61 |
| ． 9 | 10．78 | ． 9 | 7.91 | 9 | 5.16 | ． 9 | 2.55 |
| 114. | 10.71 | 118. | 781 | 122. | 5.11 | 126. | 2.49 |
| ． 1 | 10．63 | .1 | 777 | .1 | 5.01 | ． 1 | 42 |
| .2 | 10．65 | .2 | 7.70 | ． 2 | 4.97 | $\therefore$ | 2.35 |
| ． 3 | 10.47 | ． 3 | － 7.63 | ． 3 | 4.29 | ．3 | $2: 8$ |
| .4 | 10.39 | ． 4 | $\underline{2} .56$ | ． 4 | 4.82 | ． 4 | 2.21 |
| ． 5 | 10.32 | ． 5 | 7.49 | ． 5 | 4.75 | ． 5 | 2.15 |
| ． 6 | 10.25 | ． 6 | 7.42 | ． 6 | 4．tis | ． 6 | 2.09 |
| ． 7 | 10.18 | .7 | 7.85 | ． 7 | 461 | ． 7 | 2.03 |
| ． 8 | 10.11 | ． 8 | 728 | ． 8 | 4.51 | ． 8 | 1.97 |
| ． 9 | 10.01 | 9 | 7.21 | ． 9 | 4.15 | ． 9 | 1.91 |
|  | 9.97 | 119. | 7.14 | 123. | 4.92 |  | 1.85 |
|  | 9.89 |  | 7.07 | ． 1 | 4.23 |  | 1.78 |
| ． 2 | 981 | 2 | 7.00 | .2 | 428 | ， | 1.71 |
| .3 | 974 |  | 6.93 | .3 | $4 \because 1$ | ， 3 | 1.64 |
| ． 4 | 9.67 | 4 | 6.85 | ． 4 | $+11$ | ， 4 | 1.58 |
| ． 5 | 9.60 | ． 5 | 6.79 | ． 5 | 1.107 | ． 5 | 1.52 |
| ． 6 | 9.53 | ． 6 | 6.72 | ． 6 | 4.01 | ． 6 | 1.46 |
| ． 7 | 9.46 | ． 7 | 665 | .7 | 3.95 | ． 7 | 1.40 |
| ． 8 | 9.39 | ． 8 | 658 | ． 8 | 3.89 | ． 8 | 1.34 |
| ． 9 | 9.32 | ． 9 | 651 | ． 9 | 3.83 | ． 9 | 1.28 |

## YACHTING ETIQUETTE.

Time Ahfowance-Continued.


1 Guns should be tired onLY as herein directed, and (ash silute answered.
2. Whether in squadron, or otherwise, salutes should not be fired before "colors," after sunset, nor during meal hours, except upon spectal order or on national holidays.
3. Yachts not carrying guns, or in the failure of a gun to disciarge at the proper time, the en ign should be dipped once in answer to a sa'ute.
4. On joining other yachts at anchor a salute should be given at the moment or letting go anchor, and should be responded to by the senior officer then present by dipping the ensign.
5. When two yachts under way meet, the junior officer should salute first.
6. A Flag-officer should be saluted always and wherever met.
7. A Flag-officer's penant should be flying onLY when he is on board the yacht. In port on a cruise, a Flag-officer's yacht should show a light at the ensign nalliards between sunset and sunrise while the Flag-oflicer is on board; for Commodore a blue light; for Vice Commodore a red light; and for Rear Commodore a white ligh .
8. On joining fleet during a cruise a yacht should salute the flas-ship, and the flag-ship alone should respond. The Captain then should, as soon as possible, report in person on board the flag-ship.
9. No yacht should pass from a ffeet during a cruise without first receiving permission from the Commodore, and on parting company should salute the flag-ship, and the flag-ship alone should respond.
10. On joining fleet at a rendezvous or under way, or in port during a cruise, a yacht flying a flag officer's penant should be saluted by all the fleet; and when all have saluted one salute should be given in response.

If two or more flag-officer's join fleet at the same time, the sentor alone should be saluted.
11. When a Flag-omeer joins fleet between "colors" and

Stuset at rendezvous or in prart during at craise, a wn should be firud at the same time his penant is displayed; and if he joins fleet between siniset and! "enfors," a gru: slould be tired when his colors are displayed next morning.
12. On parting from a fleet duri ig a crulse, a yacht ily. Ing a Flag-otlicer's penant shoud salate the fi- et and each yacht should answer.
13. On arriving at anchorage during a cruise, if betw. en "echors" and sunset, each yacht should tire a gun on letting go anchor, but no answer need be made by any.
14. The morning gun at $s$ o clock and the evening gun at sunset should be fired ONLY by the flag-ship, and the colors should be promptly hatuled down by all the fleet.
15. When the fleet is disbanded, each yacht, on de, arting should salute the flag-ship, and the flag-ship alone should respond with colors.
16. When a flag-oflicer give notice of intention to visit a yacht, and not otherwise, the visit shall be deemed offleial and one gun shall be flred at the time he comes on board.
17. The sailing Master of a yacht should under no cir. cumstances be designated as Captain.
18. Salutes, by touching cap, should be required of Sailing Master and crew on addessing the Captain, or a guest on board, and such salutes should always be returned.
19. The starboard gangway should be used only by the Captain and his guests.
20. The order of entering and leaving boats is, juniors enter first and leave last.
21. Captains should dly their private signal only when on board; at all other times the Club signais, except, of course, between sunset and "colors."
22. Except for purpose of signaling, more than one flag should never be displayed from any mast head or peak.
23. When two or more yachts are salling in company, or at anchor in sight of each other, they will take their time for holsting their colors in the morning and hauling them down at sunset, from the senior officer in command.
24. No guns should be fired on setting or hauling down the colors except by the yacht giving the time.

25 . No salute should be fired on Sundsys, or before sumrise or after sundown.

## INSIGNIA OF RANK.

FOR COMMODORE,
Cap. On the front the gold, block letters, I-L. Y. A. with a five pointed star, embroidered in silver, on each side of and one above the letters.

Coat. Double breasted, square cut of navy-blue cloth with gilt yacht buttons. Three stripes one-half inch apart of black braid three-eights of an inch wide on sleeves, the lower stripe to be two and one-half inches from edge of cufr. The top stripe to form an oval loop on upper side of sleeves. A five pointed star embroidered in silver on each side of and one above the loop.

FOR VICE-COMMODORE.
Cap. Same as Commodore, ommitting the star above letters.

Coat. Same as Commodore, ommitting the star above loop.

## FOR RKAR-COMMODORE.

Cap. Same as Commodore, ommitting the stars on each side of letters.

Coat. Same as Commodore, ommitting the stars on each side of loop.

## FLEET CAPTAIN, SECRETARY-TREASURER, FLEET

SURGEON AND MEASURER.
Cap. Same as Commodore, ommitting stars and substituting the initial letters of their office, embroidered in sllver above the initial letters of their offlce, embroidered in silver above the letters I. L. Y. A.

Coat. Same as Commodore ommitting the three stars.

## PENNANTS.

The Commodore shall fly a swallow-tailed blue burgee, on which is a foul anchor and three white stars.

The Vice-Commodore shall fly a swallow-talled red burgee on which is a foul anchor and two white stars.

The Rear-Commodore shall fly a swallow-talled white burgee, on which is a foul anchor and one blue star.

The Fleet-Captain shell fly a pointed white flag on which are the letters F. C. in red.

These flags shall be furnised by the association and shall be returned by the officers upon the expiration of their term of office.

## Inter-Lake Vachting Ass'n.

## SIGNAI, CODF.

The Signal Code of the Association comprises seven flags viz.: H, J., L., R., S., V., and the answering pennant.

All yachts of this Association should be provided with the tlags above designated.

In signaling hoist the flags where they will be best seen.
The answering pennant must be shown as soon as the signal is seen and hoisted.

Yachts will commence to execute an order when the signal order is hauied down.

Flags and Pennants for this Code to correspond with those of U.S. Navy.

CODE.
PREPARITORY.
H Yes.
$J$ No.
L Repair on board all hands.
$R$ Boats recall.
S Prepare to get under way.
$V$ Get under way.
H J Captains come aboard.
H L All hands come aboard.
SAILING ORDERS.
H R Anchor without regard to order of sailing.
H S Anchor as near the flag-ship as possible.
H V Bear away at right angles to present course.
J H Bear up at right angles to present course.
J L Flag-ship will lead, other vessels will follow.
J R. Bear away, insuccussion, in wake of leading vessel.
J S Bear up, in succession, in wake ot leading vessel.
J V Tack, in succession, in wake of leading vessel.
L. H Tack all together.

L J Wear all together.
L R Wear in succession, in wake of leading vessel.
LS Haul by the wind on starboard tack.
L V Haul by the wind on port tack.
R H Leading vessel shorten sail.
-35-
K J Leading vessel lay to.
R L Close more the order of salling.
R 3 Fleet shorten sail.
R V Fleet lay to.
S H Disregard all particular order of salling.
S J Sail direct for (name of place to be designated in next signal.)

S L Race postponed. Look for further orders.
s V Sail in course to be designated by next signal.
V H Cannot understand your signais.
V R Race will come off at
ABOARD.
H J L. Will you come aboard.
H J R Do you wish us to come abroad?
ACCIDent.
H J S Have you met with an accident?
H J V We have met with ace.dent.
H L J There was an accident, but not to us.
H L R The accident is serious.
H L S The accident is not serious.

## ANCHOR.

H L V Where shall we anchor?
H R J Do you wish to anchor before dark?
H'R.L We wish to anchor before dark.
HRS Anchor near us.
H R V Is the anchorage good?
H S J The anchorage is bad; do not come to.
HS L The anchorage is very good; well sheltered.
H S R The anchorage is open, but good bolding ground

## ASHORF.

HS V Are you going ashore?
H V J We are going ashore.
H V L Will you go ashore in our boat?
H V R There are letters for you ashore.
H V s There are some friends of yours ashore.

JH L Are you in need of assistance?
JHR We are in need of assistance.

## $-86-$

BUOY-BEACON.
JH S Leave the buoy (or beacon) to starboard.
J H V Leave the buoy (or beacon) to port.
Commenication.
J L H Come nearer; we have important communication.

## course.

J L R Are we on a safe course?
JLs What is the proper course?
J L. V Keep your present course.
J R H North.
JRL Northeast.
J R S East.
JR V Southeast.
J S H Sonth.
J S L Southwest.
JSR West
JSV Northwest.

## BOAT,

J V H We have no boat.
J V L Can you send us a boat? DANGER.
J V R You are standing into danger.
$J$ Vs You are in dangerous position.

## FNSIGN.

L H J Show your ensign.

> HARBOR.

L H R What harbor are you from?
L. H \& To what harbor are you bound?

L H V What harbor will you make to-night?
L J H What is the nearest good harbor?
iANDing.
L J R Where is the best landing?
LEAD.
L J S Keep your lead going.

## kocks.

L. J V There are dangerous rooks; look out.

I, R H Rocks are covered with water.

## -37-

L R J If you sight rocks signal us
L R S The rocksare in sight.
SHORE.
L R V Keep in near the shore.
L S H Keep clear of the shore.
SHOAL.

LS J There is shoal water ahead.
L S R What depth of water is there?
LS V There is over a fathom of water.
L $\mathrm{V} H$ There is over five feet of water.
L. V J There is over four feet of water.

## WEATHER.

L V R Weather looks bad; you better make harbor.

## NAMES OF PLACKS.

R V L Amhersburg.
R V S Ballast Island.
R H J Bar Point.
R H L Bay Point or North Cape.
R H S Black River.
R H V Bois Rlone Island.
R J H Catawba Island.
R J S Cedar Point, Maumee Bay.
R J V Cedar Point, Sandusky Bay.
R L H Cleveland.
R L J Detroit.
R J L. Dunkirk.
R L S Erle.
R L. V East Sister.
IZ S H Fighting Island.
R S J Gard's lsland.
R S L Gibralter.
R S V Grosse Isle.
R V H Green Island.
R V J Grassy Point.
R V Ls Huron.
\& H L Ironville.
R V S Hen and Chickens.
s H R Johnson's Island.
s V H Jamestown.

S J H Kelley's Island.
s J L Lakeside.
S J R Locust Point.
S J V Middle Island.
S L H Middle Bass Island.
S L J Middle Sister Island.
s L R Monroe.
SL V Moores Point.
s R H Mouse Island.
s R J Marblehead Light.
s R L Manhattan.
s R V North Bass.
s V H Ottawa.
S V J Edgwater.
S V L Put-in-Bay.
SVR Point an Pelee.
V H S Presque Isle
V H L Port Clinton.
V H R Point Monillee.
V H s Rondean Harbor.
V J H Rattle Snake Island.
V J L Rocky River.
V J R Raisin Point.
V J s Scott's Point.
V LH Sandusky.
V L J South Bass.
V L R Swan Creek.
V Ls Stony Point.
V S L Toledo.
VRH Trenton.
V R J Turtle Light.
V R L West Sister.
v R S Wheeling Bridge.
VSH Ward s Canal.
V s J West Harbor.
V is R Wyandotte.
miscellanfouts.
H J L R Ashtabula River.
H J R \& Buffalo.
H J L S Bell Isle.
H J S R conneaut.
H J V R Canada.

H L J R Erie.
H L R S Gibraltar Light.
II L V R Grand River (Ohfo).
H R J s Inner Bay (Long Point Island).
H R L S Long Point Island.
H R V s Port Burwell.
HSJR Port Colborne.
His R Port Dover.
HSLV Port Huron.
H S R V Port Maitland.
H S V R Port Stanley.
H S V L St. Clair Flats.
H V RS Vermillion River.
H V R L Kingston.
H V R J Montreal.
HVSL Toronto.

