




SIV 14

Empowering
Adaptive Sailing

Built and supported by |  **FAREAST**
FOR ALL GENERATIONS





WELCOME

BECOME PART OF THE S\V14 COMMUNITY

The S\V14 project started on the 29th of October 2015. Peter Jacops, a specialist CE inspector for the certification of yachts, posted a small note on his Facebook page asking if any designer would be willing to help him create a low-cost sailing boat specifically for people with disabilities (PWD) and make the design freely available to them.

One of the biggest problems is that there are only a small number of boats available, which are nearly all at a price level that puts them out of reach of many potential sailors. As the market is small for PWD yachts and dinghies, their price is inflated and there are hardly any available on the used market.

The answer lies in getting the boat to build by volunteers for those sailors with a disability. The design team developed a building kit so that this design could be built easily at a DIY level by volunteers, amateurs and handy home builders without the need of expensive tools.

This effort has now received a major boost by the Shanghai based company Fareast Boat, this Chinese based company Fareast offered the S\V14 community to produce a GRP version. By making the first one thousand S\V14's available at a cost which lies below the raw material cost for the wooden version, the aim is to kick start the class by introducing as many people with disabilities as possible to sailing, with the ultimate goal of seeing participation grow to a number that sailing can take its rightful place once again in the Paralympics.



SV 14

USA SAILS



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1. INTRODUCTION

This manual has been compiled to help you to operate your S\V14 with safety and pleasure. Please read it carefully and familiarize yourself with the boat before using it. This owner's manual is not a course on boating safety or seamanship. If this is your first boat, or if you are changing to a type of boat you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before “operating” the boat. The national sailing federation or yacht club will be pleased to advise you of local sail training schools, or competent instructors.

Ensure that the anticipated wind and sea conditions will correspond to the design category of your boat, and that you and your crew are able to handle the boat in these conditions. Even when your boat is categorized for them, the sea and wind conditions corresponding to the design categories A, B and C range from severe storm conditions for category A, to strong conditions for the top of category C, open to the hazards of a freak wave or gust. These are therefore dangerous conditions, where only a competent, fit and trained crew using a well-maintained boat can satisfactorily operate. Do not exceed the maximum recommended load (see section 2.5) as this could subject the boat to excessive loads with possible structural damage. The reduced freeboard will also increase the risk of flooding in severe conditions.

This owner's manual is not a detailed maintenance or trouble-shooting guide. In the case of difficulty, refer to the boat builder or his representative. If maintenance manuals are provided, use it for the boat's maintenance. Always use trained and competent people for maintenance,

repairs or modifications. Modifications that may affect the safety characteristics of the boat should be assessed, executed and documented by competent contractors. The boat builder cannot be held responsible for modifications that he has not approved.

In some countries, a licence or authorization are required, or specific regulations are in force that must be met before operating the boat.

Always maintain your boat properly and make allowance for the deterioration that will occur over time and as a result of heavy use or misuse of the boat. Any boat, no matter how strong it may be, can be severely damaged if not used properly. This is not compatible with safe boating. Always adjust the speed and heading of the boat to suit the sea conditions.

The boat should have onboard the appropriate safety equipment (lifejackets, harness, etc.) according to the type of boat, weather conditions, etc. This equipment is mandatory in some countries. The crew should be familiar with the use of all safety equipment and emergency manoeuvring (man overboard recovery, towing, etc.), sailing schools and clubs regularly organize drill sessions.

All persons should wear a suitable buoyancy aid (life jacket/personal floatation device) when on deck. Note that, in some countries, it is a legal requirement to wear a buoyancy aid that complies with their national regulations at all times.

Please keep this manual in a secure place, and hand it over to the new owner when you sell the boat.

1 GENERAL INFORMATION AND CRAFT DATA

1.1 MANUFACTURER

Type:	S\V14
Builder name:	Shanghai Far East FRP Boats Co., Ltd.
Builder address:	Room 605, Building 5, Xizi International Center, No.898 Xiuwen Road, Minhang District, 201199 Shanghai, P. R. China Zip code: 201100
Builder website:	www.fareastboats.com
Builder email:	fareast@fareastboats.com

1.2 MAIN DIMENSIONS

Length overall:	5.35 metres
Length of hull (excl. rudders + bow sprit):	4.39 metres
Length of waterline	4.36 metres
Beam overall:	1.59 metres
Draft max (keel down)	1.20 metres
Air draft (empty):	Approx. 6.15 metres



1.3 MASSES

Light ship mass:	300 kilograms	
Launching weight (approx.):	345 kilograms	(Includes canting seat system)
Maximum loaded mass:	525 kilograms	(Light craft weight + Maximum recommended load)
Keel weight:	142 kilograms	

1.4 MAXIMUM RECOMMENDED LOAD

Desired crew limit at 75 kg each *	150 kg	2 persons
Provisions & personal effects	30 kg	
Optional equipment and fittings not included in basic outfit	<u>45 kg</u> +	
Maximum recommended load	225 kg	As shown on builders plate

* The boat is designed to be able to carry two crew up to 90 kgs each.



Warning: When loading the yacht, never exceed the maximum recommended load. Always load the yacht carefully and distribute loads appropriately to maintain design trim approximately level. Avoid placing heavy weights high up.



1.5 SAIL AREAS

Main sail:	6.7 square metres
Jib:	2.1 square metres
Gennaker:	9.5 square metres



2 CERTIFICATION AND DESIGN CATEGORY

The S\14 GRP is certified by the manufacturer according to the essential requirements of the Recreational Craft Directive 2013/53/EU.

As shown on the builders plate the yacht is designed for operation in conditions as described for **design category D**.

Design category D: Designed for voyages on sheltered coastal waters, small bays, small lakes, rivers and canals when conditions up to, and including, wind force 4 and significant wave heights up to, and including, 0,3 m may be experienced, with occasional waves of 0,5 m maximum height, for example from passing vessels.

Remark: The significant wave height is the mean height of the highest one-third of the waves, which approximately corresponds to the wave height estimated by an experienced observer. Some waves will be double this height.

2.1 INFORMATION ON BUILDERS PLATE

On your boat you can find a builders plate indicating the design category, maximum number of persons and the maximum recommended load of the S\14.



Warning: Do not exceed the maximum recommended number of persons. Regardless of the number of persons on board, the total weight of persons and equipment must never exceed the maximum recommended load. Always use the seats/seating spaces provided.



2.2 WATER CRAFT IDENTIFICATION NUMBER (WIN)

The watercraft identification number of your boat can be found at the starboard side of the transom. When you would like to communicate with the manufacturer or the S\14 organization about your boat, please have this number ready.

3 SAFETY RECOMMENDATIONS

3.1 RISK OF FLOODING AND STABILITY

Stability recommendations:

- All crew members need to be adequately trained.
- Any change in the disposition of the masses aboard (for example adding load or changing the sail configuration, etc.) may significantly affect the stability, trim and performance of the boat;
- Bilge water should be kept to a minimum, before leaving the harbour properly drain the compartments;
- Stability is reduced by any weight added high up;
- In rough weather, hatches and buoyancy chambers should be closed to minimize the risk of flooding;
- Breaking waves are a serious stability hazard.

Before leaving the harbour please make sure that all (inspection) hatches are closed.



Important - This boat is only intended to be sailed with the drop keel locked in the lowered position. Failure to observe these limitations may result in the boat capsizing.

3.2 OPERATION OF THE CANTING SEAT SYSTEM



To avoid personal injuries, ensure that limbs, feet's and fingers are kept clear of the moving parts of the canting seat mechanism. Please make sure that the feets are in the straps before operating the canting seat system.

3.3 MOORING AND TOWING

For mooring the S\V14 you can use the U-bolts for attaching the fore and side stays. In case the S\V14 has to be towed, a line can be attached at the U-bolt of the fore stay.

- The owner is responsible for using adequate mooring lines, towing lines and anchor chain and lines.
- The breaking strength of the lines used shall not be more than 80% of the breaking strength of the associated strong point.
- The crew needs to familiarize themselves with attaching the towing line to the bow tie down point.
- Towing and being towed is done at low speeds e.g. 3 knots.
- When attaching the towline prevent using knots that can't be undone under load.

3.4 MAN OVERBOARD PREVENTION AND MEANS OF REBOARDING



When people fall overboard they can reboard at the transom of the S\V14.

3.5 FIELD OF VISION FROM THE HELM POSITION

The Operator's vision from the helm can be obstructed by high trim angles of the boat and other factors caused by one or more of the following variable conditions:

- Loading and load distribution.
- Speed.
- Sea conditions.
- Rain and spray.
- Persons or movable gear in the operator's field of vision.

Please make sure that the helmsman has got all round visibility at all times.

The international Regulations for Preventing Collisions at Sea (COLREG) and the rules of the road require that a proper lookout be maintained at all times and observance of right of way. Make certain no other vessels are in the path of your boat before proceeding.

3.6 LIFTING OF THE BOAT

There are several ways to launch your S\V14 into the water. An overhead hoist with a minimum of 500 kg capacity should be used when lifting the S\V14 from your trailer. Use a wide-enough spreader bar on each sling to prevent damaging side pressure to the deck or gunwale moulding. Lifting slings must never contact shafts, struts or hardware protruding from the hull as this may result in damages.

You can also hoist the S\V14 on the keel

When the boat is out of the water, it is important to support the hull correctly on the trailer or a proper cradle to avoid any hull damage. Always make sure that the keel is supported when storage your boat on the land.

4 MAINTENANCE

4.1 GENERAL CARE

Regularly maintenance keeps your vessel in good condition. Maintenance should be performed by qualified personnel.

4.2 CLEANING

Periodic cleaning is the best way to keep your boat looking like new. Thoroughly clean the hull, deck and interior of the boat from time to time.

When washing the boat, be sure to use a mild detergent and warm water solution. DO NOT use abrasive cleaners, solvents, ammonia or chlorine, as these will damage the gelcoated surface. Under extreme conditions, special cleaners may be used to remove marine growth from the hull.

Harsh abrasive and chemical cleaners are not recommended. Be careful not to polish through the gelcoat surface.

Wax your boat at least once every year. Wax seals and protects the surface, minimizing the collection of dirt. Use special boat wax, or a silicone-free automotive type.

Whenever the weather makes it possible, air and ventilate regularly the buoyance chambers of your boat. Make sure that the inside of your boat is clean and dry.



5 DECLARATION OF CONFORMITY

of Recreational Craft with the Design, Construction and Noise Emission requirements of Directive 2013/53/EU

Name of recreational craft manufacturer: Shanghai Far East FRP Boats Co., Ltd.
Address: Room 605, Building 5, Xizi International Center, No.898 Xiuwen Road
Town: Minhang District, 201199 Shanghai Post Code: 201100 Country: P. R. China

Module used for design and construction assessment: A A1 B+C B+D B+E B+F G H

Other Community Directives applied: Not applicable

DESCRIPTION OF RECREATIONAL CRAFT:

Watercraft Identification Number:

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Brand name of the Recreational craft: Far East

Model, Type or number: S\V14

Type of construction:

- Rigid
 Inflatable
 Rigid-Inflatable (RIB)

Length of hull L_H: 4.39 m

Beam of hull B_H: 1.59 m

Maximum Draught T: 1.20 m

Type of hull:

- Monohull
 Multihull

Deck:

- Fully enclosed
 Partially protected
 Open Craft

Hull construction material:

- Aluminium, aluminium alloys
 Moulded Fibre Reinforced Plastic
 Steel, steel alloys
 Wood
 Other (specify): _____

Main propulsion:

- Sailing under projected sail area A_s of : 8.8 m²
 Human propulsion
 Engine/motor propulsion
 Other (specify): _____

Watercraft Design category related to the maximum recommended number of persons:

Design Category	Number of Persons	Max Load (kg)
D	2	225

This declaration of conformity is issued under the sole responsibility of the manufacturer. I declare on behalf of the manufacturer that the recreational craft mentioned above fulfils the requirements specified in Article 4 (1) and Annex I of Directive 2013/53/EU.

Name and function:

Signature and title:

Date and place of issue (dd/mm/yyyy): / /

Essential requirements (reference to relevant articles in Annex IA & IC of the Directive)	Harmonised standards	Harmonised standards	Other reference documents	Other reference documents	Other proof of conformity	Specify the harmonised standards or other reference documents used (with year of publication like "EN ISO 8666:2002")
General requirements (2)						
Principal data – main dimensions	<input checked="" type="checkbox"/>					EN ISO 8666: 2002 - Principal data
Watercraft Craft Identification Number – CIN (2.1)	<input checked="" type="checkbox"/>					EN ISO 10087:2006 - Craft identification Coding system
Watercraft Builder's Plate (2.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO 14945:2004/AC:2005 Builder's plate
Protection from falling overboard and means of reboarding (2.3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO IS085:2003/AI:2009 - Man-overboard prevention and recovery
Visibility from the main steering position (2.4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See technical construction file
Owner's manual (2.5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO 10240:2004 - Owner's manual
Integrity and structural requirements (3)						
Structure (3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO 12215-5:2008/AI:2014 - Hull construction and scantlings
Stability and freeboard (3.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO 12217-3:2015 - Stability and buoyancy assessment and categorization – Part 3: Boats of hull length less than 6 m
Buoyancy and flotation (3.3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO 12217-3:2015 - Stability and buoyancy assessment and categorization – Part 3: Boats of hull length less than 6 m
Openings in hull, deck and superstructure (3.4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Flooding (3.5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO 15083:2003 – Bilge pumping system
Manufacturer's maximum recommended load (3.6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO 14946:2001/AC:2005 - Maximum load capacity
Liferaft stowage (3.7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Escape (3.8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Anchoring, mooring and towing (3.9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO 15084:2003 - Anchoring, mooring and towing - Strong points
Handling characteristics (4)						
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Engines and engine spaces (5.1)						
Inboard engine (5.1.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Ventilation (5.1.2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable

Exposed parts (5.1.3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Outboard engine starting (5.1.4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Fuel system (5.2)						
General – fuel system (5.2.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Fuel tanks (5.2.2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Electrical systems (5.3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN ISO 10133:20 12 . Electrical systems · Extra low voltage d.c. installation (if applicable)
Steering systems (5.4)						
General – steering system (5.4.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See technical construction file
Emergency arrangements (5.4.2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See technical construction file
Gas systems (5.5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Fire protection (5.6)						
General – fire protection (5.6.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Fire-fighting equipment (5.6.2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Navigation lights, shapes and sound signals (5.7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Discharge prevention (5.8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Annex I.B – Exhaust Emissions						
Annex I.C – Noise Emissions						
Noise emissions level (I.C.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
Owner's manual (I.C.2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable

6 DISCLAIMER

The description and specifications contained herein were in effect at the time this manual was approved for printing. Even though care has been taken in the preparation of the contents of this owner's manual, Shanghai Far East FRP Boats Co., Ltd. and Wijma Marine Consultants does not assume legal or other liability for any inaccuracy, mistake, misstatement or any other error of whatsoever nature contained herein. Shanghai Far East FRP Boats Co., Ltd. and Wijma Marine Consultants formally disclaims liability in respect of such aforesaid matters. The information contained within this owner's manual of a condensed and general information nature only and your boat can change from the contents.

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