

Another addition to our line of flats boats!

SPECIFICATIONS							
	LOA	18'	5,5 m				
	Max Beam	54"	1,37 m				
	Hull weight *	200-265 lbs.	90-120 kg				
	Hull Draft at 765 lbs.	3.5"	8,89 cm				

\* All specifications are approximate and subject to changes in function of the mood of the designer and the skills of the builder.

The ideal outboard is between 10 and 15 HP. Per USCG calculations. max. HP can be 25 HP, but the designer finds this excessive. Don't think in terms of an 18' boat, think of a 250 lbs. 4-1/2' wide boat!

Speed predictions: Loaded at 1,000 lbs., with a 25 HP = 32 mph, with a 15 HP, 25 mph; At 800 lbs., 28.5 mph with a 15 HP.

USCG tag: max. HP = 25. Capacity persons and gear: 765 lbs. or 4 persons.

Hull weight: depending on the skills of the builder and options, between 240 and 265 lbs. The FS18 can be build lighter, see the options paragraph.

Hull draft is just that, the skeg adds 1" but even with the skeg, 3.5" is not bad. At a very heavy displacement of 1,110 lbs., hull draft is only 5"

# TABLE OF CONTENTS

PECIFICATIONS	1
DESCRIPTION	3
UILDING METHOD	4
EQUIRED SKILLS	4
DPTIONS	5
ABOR	
ILL OF MATERIALS	6
AORE	7
LICENSE	7
BUILDING STANDARDS	7
LANS PACKING LIST	7

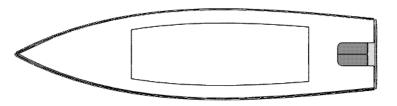
#### Flats Stalker 18 – Study Plans

#### **Boat Builder Central**

## DESCRIPTION

The Flats Stalker is a simple but rugged and easy to pole boat designed for hardcore skinny water sight fishing. It is designed for tiller steering first and has a clean open layout that is easy to customize. It will pole effortlessly into the wind and against the tide thanks to it's narrow and shallow hull. Hull slap is almost nonexistent thanks to the absence of spray rails and low chine design. There is even an option showing a rounded chine towards the bow.

Most of our other flats boats designs have an extra wide beam. This gives us a large water plane and results in a very shallow draft. The best example is the XF20 in which we extended the water plane area in an extreme way: 2" draft in a boat that can handle up to 5 people with gear. There is unfortunately a price to pay when poling:



you cannot easily pole such a wide boat. Several of our builders requested a narrow light skiff. Those boats exist since more than 100 years in the Everglades, the concept is not new. Our FS18 is not as narrow as the traditional <u>Everglades Skiff</u>, but it is easy to pole and more stable. The FS18 has the same waterline beam and is just as stable as some fiberglass production boats 1' wider at the deck.

This is a tiller boat, but many will install a grab rail in the middle, maybe on a central box. Controls and some small electronics can fit on the grab rail. Stick steering could be nice too.

The F\$18 has a self-bailing cockpit. Hull draft at 1,100 lbs. is 4" and the top of the sole is located well above that.

The FS18 will easily fish two people and you can fish three if necessary. The front deck is big with room for a casting platform. There is usable storage underneath the front deck, even with a portable fuel tank. There is room for rod storage under gunwales: cut notches in the frames.

At the bow, the sides raise a little bit above the casting deck. That little edge is not in the way of a trolling motor



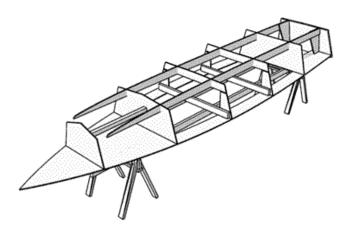
mount. It is max. 4" at the tip , only 2" where one normally mounts the trolling motor. Most of the trolling motor mounts clear the deck by more than 2". If not, it is easy to make a raised mount from a couple of layers of plywood epoxy glued to the deck. Another solution is to cut a notch where the motor mounts or to cut the sides down and make her a flush deck, but the sheer line will not be as pretty. However, for those who prefer the flush deck (straight sheer) look, the plans include the dimensions for that version. Only the side panel is different.

#### BUILDING METHOD

The construction method is stitch and glue. It makes for a very stiff and strong yet light boat. As with all our plans, no lofting is required.

The FS18 is built the same way as our FS12 and FS14: upside down on a pair of 2x4's. The hull panels are installed around the frames and we use the decks as a base. See the FS12/14 study plans for details. There is also a long thread on our forum showing the FS12 assembly with plenty of pictures and comments. The FS18 is built the same way.

All our boats are very sturdy. This one will be able to crash on an oyster bed at 25 mph without sinking. We could make it lighter but there would be a price in toughness.



BUILDER THREADS ON OUR FORUM					
<u> Cracker Larry - A Cracker Built FS18 - Georgia, USA</u>	doubleup - "La Flaca" FS18				
<u> Mikem59 - Mikem59 FS18 Build - Texas, USA</u>	<u> Pro Wader - Pro Wader FS18, SPLASHED - Texas, USA</u>				
<u> Cannonball - Cannonball's FS18 - Texas, USA</u>	<u>Jsheaffer - Jason fs 18 cnc build rounded chine -</u> <u>Texas, USA</u>				
<u>Fishwater - Fishwater's FS18</u>					
<u> Stuff4Toys - Mike's FS18 Build - Florida, USA</u>	<u>FIaFF - FS18 - FIorida, USA</u>				
<u>K2FS18</u>	<u>Super Spook - Super Spook's FS18 Build - Florida, USA</u> ( <u>Blog</u> )				
<u>rbecker - FS18 - Florida, USA</u>	seaslug - FS18 speeds with 20hp - Florida, USA				
<u>Dutch1 - Steve's FS18 - Florida, USA</u>	<u> Cracka - F\$18 baseline - New South Wales, Australia</u>				
<u> Bayport Bob - FS18 Done Deal Florida, USA</u>	jrkayakin - Started the fs18 build - Florida, USA				
<u>Shamrock Kid - Texas, USA</u>	Reid - FS18 Straight Sheer, Round Chine - Florida, USA				

## **REQUIRED SKILLS**

There is nothing difficult about building a skiff this way: a boat like this one goes together fast and easy. There are no plywood scarfs: we use very simple fiberglass splices. Our building method involves cutting plywood panels flat on the shop floor with moderate precision, from the dimensions give on the plans. Long panels are made of smaller pieces joined with fiberglass splices. We use standard plywood sheets only. No lofting, no calculations, no delicate beveling or scarfing. No woodworking skills or special tools are required.

# OPTIONS

Besides the grab rail and stick steering mentioned above, the builder has complete freedom to change the layout as long as he keeps 3" wide frames where we show them. Decks can be made longer or shorter, a central box containing a bait well will be a nice addition.

- Light weight: You could build an F\$18 without a deck, just with a rubrail and get the weight down to 160 lbs. With a small engine (15 HP) and 2 people onboard, that would give a hull draft of 2.5 " at level trim.



- Cut transom for 15" shaft. The standard transom is designed for the most common shaft in that size, 20" but it is easy to cut the transom 5" lower if you want to use a 15" shaft.

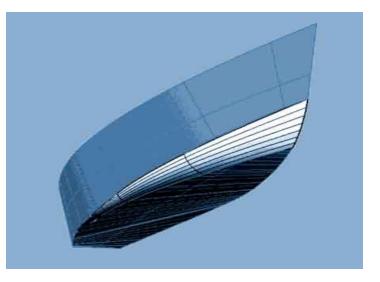
- Straight sheer (flush deck)option. The plans show dimensions for a side panel cut down to create a straight sheer. This will make the Flats Stalker look like some fiberglass production boats.

- Central bench: the plans show the dimensions for an extra frame in the middle of the boat used to support an optional thwart (seat across the beam).

- Zero hull slap: the plans show a rounded chine option. Note that with that low chine and no spray rails there is almost no hull slap with the hard chine but for those who want the ultimate, we show an optional rounded chine.



The round chine extends almost 7'. This is not really necessary since only the 3 last feet of the chine are above the waterline, but it produces a smooth transition. The aft part of the chine is the classic planing boat hard chine. It gives lateral dynamic stability at planing speed and since it is below the waterline, produces no hull slap. That option is easy to implement for anybody who has a built at least one stitch and glue boat. All the dimensions are on the plans: each slit is shown. This rounded chine is a simple transition from plywood sheet planking to strips, at the chine, close to the bow. No need to purchase strips, we cut 3 slits in each panel, topside and bottom, round the corners of the two forward frames and that is all there is to it.



## Flats Stalker 18 – Study Plans

#### Boat Builder Central

## Page | 6



To make the boat unsinkable by pouring <u>two-part foam</u> under the sole is a highly recommended option. For a professional builder in the USA, it would not be an option: all boats of that size must have upright floatation. This is achieved by pouring foam under the sole, filling some space under the aft deck with foam, and gluing foam sheets under the gunwales.

# LABOR

The average construction time for the hull is 70 hours ready for sanding and paint.

## BILL OF MATERIALS

Plywood (4x8' – 122x244cm)					
6 mm (1/4")	6				
9 mm (3/8'')	3				
Also see our <u>CNC Kit</u> , which is a precut plywood kit that includes all the plywood needed to build the boat as designed.					
Fiberglass Fabric and Tape					
Fiberglass Biaxial Tape 45/45 12 oz., no mat, 6 in.	150 yards	137 m			
12 oz – 50'' Biaxial Cloth	18 yards	16.5 m			
Resin					
Ероху	6 gallons	22.7 liters			
Also see our MarinEpoxy or Silvertip Epoxy kits which include all of the epoxy and fiberglass listed.					

This BOM covers all the supplies for this boat as designed. Usage of materials will vary in function of several factors. An experienced builder will use less resin. First time builders always use more resin, take that in account. Our resin usage calculations are based on a 50% glass content. Options, customization, and variations in fabric and foam cutting preferences will also affect the Bill of Materials. Our figures show an estimated average. Small variations in fiberglass specifications are acceptable, consult us for substitutions.

## MORE

Visit our forum, help pages, tutorial pages and read our FAQ: most questions are answered there.

## LICENSE

As with all our plans, you have the right to build one boat from those plans. The designer holds the copyright to the design, and you purchase a license to build one boat. If you plan to build more than one boat, please contact us about licensing fees.

## BUILDING STANDARDS

These plans were drafted according to the ABYC rules. The ABYC (American Boat and Yacht Council) defines the boat building standards in collaboration with the USCG. Professional builders may be subject to more requirements. Consult the designer.

The ABYC standards are very close to the ISO norms and CEE requirements but no European certification was applied for since this is not required for amateur boat building in Europe. CEE/ISO certification is available to professional builders for a fee.

## PLANS PACKING LIST

Plans are available in metric or US units.

- 🚈 B279\_1 Specifications
- 🚈 B279\_2 Nesting
- 🚈 D279\_3 Stations and Lines
- 🚈 D279\_4 Plates
- 🚈 D279\_5 Construction
- Mail B279\_6 Round Chine Option
- Me Specific building notes for this boat
- Melp files reference list and more.