

STINGRAY PROTOTYPE

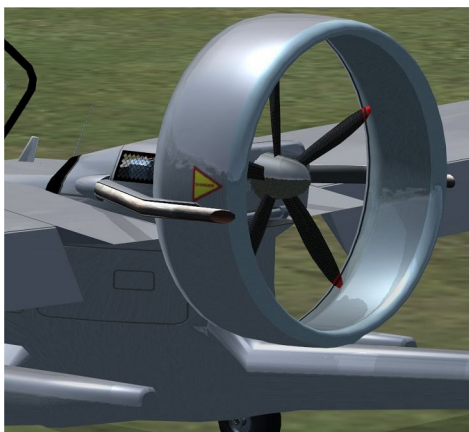
MULTI-PURPOSE AMPHIBIOUS AIRCRAFT FOR FSX SP2



Thank you very much for your interest in this model. I trust that the *Stingray* will spice up your FSX experience and puts a smile on your face every time you enter her cockpit (wow! Please don't read me wrong here ☺). Anyway....

The *Stingray* is a small futuristic amphibious plane constructed with the latest available space age composite and metallurgic materials making it a very light but sturdy and durable aircraft. Power is from a *special modified Lycoming* six-cylinder engine, spinning a five bladed *Thrustmaster* prop at high revolutions inside an innovative *thrust-duct*. The engine, propeller and *thrust-duct* combination deliver an almost jet like stream of air pushing the *Stingray* forward at speeds exceeding 280 mph. At the same time it also enables the *Stingray* to fly at very slow speeds.

The *Stingray* is developed to serve in many different roles. With the wings folded away, she takes up very little space. This makes her an ideal candidate as part of the aviation inventory on smaller naval, coast guard and search and rescue vessels. Apart from probable maritime, military and law enforcement applications, she is also a sought after leisure aircraft by those that can afford her. Unfortunately she exists in FSX virtual world only! ;-)

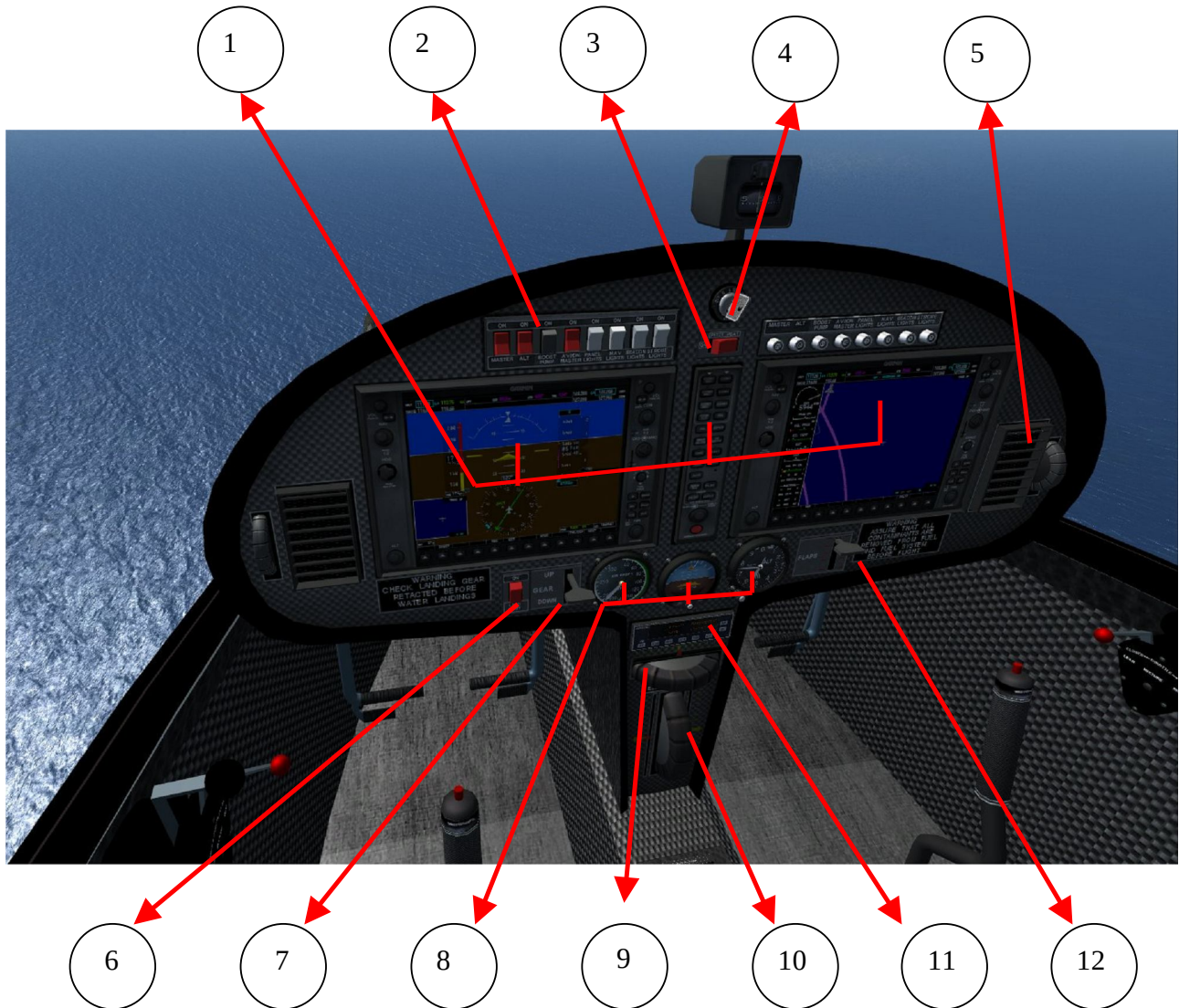


This FSX aircraft model is my own design. I do not claim that the design is aerodynamically or mechanically sound and flyable in the real world as it does in FSX.

FEATURES

The model is very detailed and fully animated including a pilot and folding wings. It is equipped with modern avionics in a fully functional 3-D virtual cockpit. The 2-D cockpit in this model is primarily there to aid in reading the G1000 panels. The G1000 panels, audio, compass and autopilot is default FSX gauges. The standby gauges are my own 3-D gauge designs.

Panel (G1000 glass cockpit):



- 1 G1000 Glass Cockpit (default FSX gauges).
Note: These gauges are of very high resolution. **If you experience a frame rate hit, turn off the high-resolution 3-D virtual cockpit in the aircraft display settings under display options in FSX.**

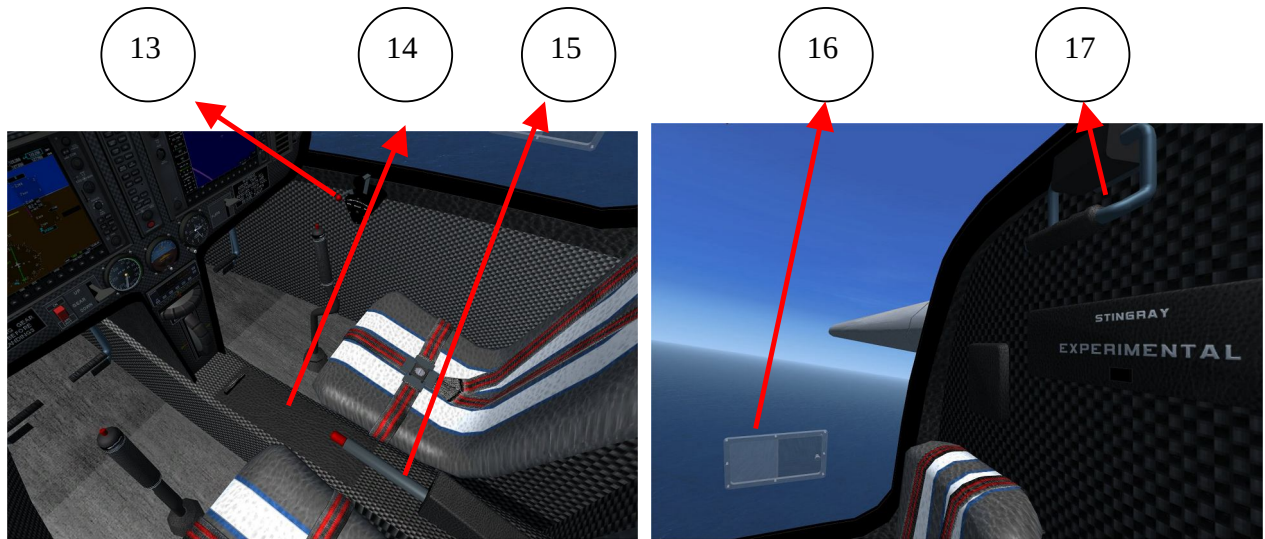
The RPM reading and maybe some other engine operating info are incorrect for this aircraft.

- 2 Switch panel.
Note: The **master switch** (left most) in the off position, **removes the pilot** from the cockpit. After sunset the **panel light switch** must be on for the G1000 panels to light up.
- 3 Pitot Heat Switch.
- 4 Ignition.
- 5 Cabin air vents on both sides. Click the wheel to open/close.
- 6 Landing and taxi light switches.
- 7 Landing gear lever.
- 8 Standby gauges (Air Speed, Horizon, Altitude). These 3-D gauges are part of the model. You will not find them in the panel.cfg.
- 9 Rudder Trim.
- 10 Elevator Trim.
- 11 Autopilot (default FSX gauge).
- 12 Flaps lever.



Cockpit viewed from the outside.

Virtual Cockpit:

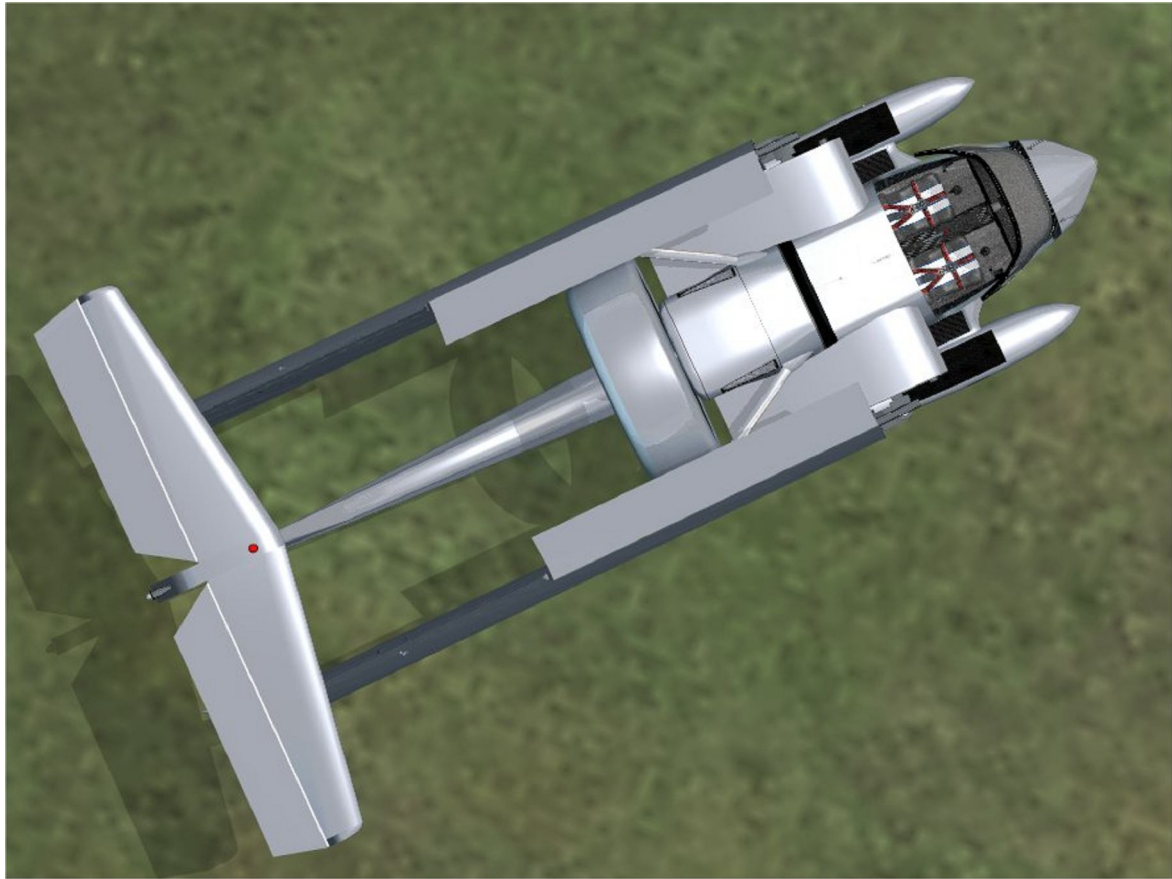


- 13 Throttle and mixture control on both sides.
- 14 Map box. Click to open/close.
- 15 Park brake.
- 16 Canopy air vent on both sides. Click to open/close.
- 17 Canopy lever. Click to open/close.

Folding wings:



Key assignment: I assigned the “,” key for wing folding. You may assign to any available key you wish. (Options/Settings/Controls/Buttons/Keys in FSX).



FLYING THE *STINGRAY*:



True to her feminine nature she is straightforward, somewhat tamed and most of the times forgiving. She starts slowly but picks up speed very quickly in a clean configuration. The rudder sits right in the center of that jet stream of air so use it sparingly at high speeds. In a dirty (full flaps and gear down) configuration she will happily drift around at 60 knots doing tight 3-sixties with full rudder.

Stall speed with or without full flaps: No violent wing dropping. She will just sink slowly a little nose high till about 40 knots then a gentle rocking around the x-axis will occur till you straighten her out again.

Runway takeoff and landing: Takeoff roll begins somewhat slowly but speed builds quickly. Rotate at 65 knots flaps up. Landing with full flaps is at anything around 50 knots. Keep the weight off the nose gear as long as possible after touchdown.

Water takeoff and landing: Same as above but with wheels up. On takeoff just let her accelerates and lift off will happen soon. On landing keep the approach speed slow around 50 knots with the nose a bit above the horizon. Reduce speed steadily till she settles down smoothly.

Some silly fun thing one can do is to taxi into the water with the wings folded. Raise the landing gear and use her as a speedboat skimming the water surface at 100 knots!

STOL: She does possess some STOL capabilities but that needs practice to master. If you do get it right you can get her in and out some tight spots. For a stick in the stomach STOL full flaps takeoff keep the brakes on and let go as soon as maximum engine revs (listen to the engine noise) are reached.

FSX REQUIREMENTS:

The model was tested with Windows XP and Windows 7. You must have at least FSX Acceleration or Service Pack 2 installed on your PC, for the model to display correctly.

INSTALLATION INTO FSX:

Just run the setup.exe for the *Stingray Prototype*. The installation path is set to C:/Program Files/Microsoft Games/Microsoft Flight Simulator X/SimObjects/Airplane Folder. If this path does not point to the FSX installation on your machine please browse to the correct path. After installation you will find her under *Stingray Futuristic Prototype* in the aircraft select menu.

New Sound:

The sound is aliases to the default Extra300, to get a high pitch prop sound. You will therefore not hear water landing sound. To correct this I included a reworked sound.cfg for the Extra300, to which the “waterloop” sound is added. If you want to use the new sound, backup your original Extra300, “sound.cfg” file and replace it with the included one, which you will find inside the *Stingray Aircraft* Folder.

For those that do not know how here is how but whatever you do hereafter is at your own risk. So if you are still uncertain after reading the following procedure, rather leaves everything the way it is till you can find someone knowledgeable to assist you:

Explore to the Extra300, Airplanes Folder in FSX (Your Drive/Program Files/Microsoft Games/Flight Simulator X/SimObjects/Airplanes/ Extra300). Open the Extra300 folder. Inside you will find a sound folder. Open the “**sound folder**” not the “soundai” folder. Look for the “Sound.cfg” file in the sound folder then copy and past it somewhere else safe. Or if you prefer just rename the “Sound.cfg” to something like “backup sound.cfg “ and keep it in the Extra300 sound folder. Right, now that you are happy the original “Sound.cfg” is safely backed up or renamed you can go ahead to copy and past my included “Sound.cfg” to the Extra300 sound folder. Overwrite if prompted. Close all open windows. That’s it.

Those that do have other suitable amphibious propeller aircraft installed into FSX can of course alias that aircraft's sound to the *Stingray* if so wish.

KNOWN ISSUES:

Lights: Wandering around especially the landing light. Think this is a FSX issue so cannot do much about it.

Water surface in cockpit: Because she sits so low in the water you will see the water surface inside the cockpit from certain view angles.

REDISTRIBUTION:

This is a freeware model so you may not make money from it. You may redistribute this complete package anyway you like as long as it remains freeware and also mentioning my name.

REPAINTS:

This package comes with the one prototype "factory clean" livery only. You are welcome to repaint and post your work as freeware on any website as long as you mention my name together with your work. The default color is a clean gray so you should not experience too much difficulty converting that color into something else.

Happy Flying!

Simon Smeiman
smeiman@yahoo.com

Lastly on a more serious note...

I am 56 years of age and do not have a job or regular income anymore. To get any kind of job at my age in my country (South Africa) is because of strict affirmative quota action policies like striking a Lotto jackpot. It just does not happen. I therefore started some time ago to design commercial and freeware aircraft for Flight Simulator to earn some money. Up to now the commercial aircraft has helped me to some degree to make ends meet for which I am very grateful. However, I have now reached the point where all my spare funds are rock bottom dried up. At this moment I am very, very desperate. I am therefore asking (begging if you will and I truly feels very bad doing this) please, if you can, any donation will be very much appreciated.

If you do feel like donating a penny or two you can make a deposit at your Bank in your own local currency using my following Bank details:

Standard Bank: South Africa
Account Number: 077665147
SWIFT- address (for international deposits): SBZA ZA JJ

Thanking you in advance and please drop me an e-mail anytime.
Simon

Visit www.fsaddon.eu for more information about my commercial aircraft. Most of my freeware aircraft are available from the popular flight simulator web sites.