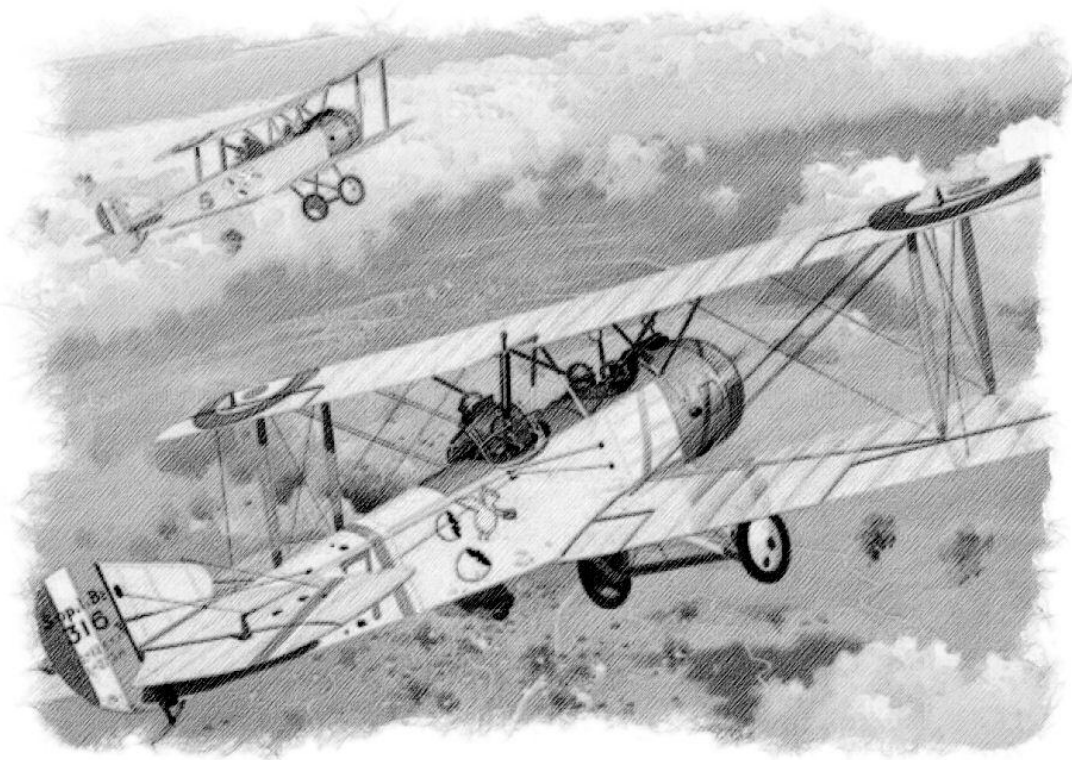


Flying and Air Fighting in the
Sopwith 1 ½ Strutter
Over Flander's Fields

A Guide for New Pilots
By
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St-Pol-sur-Mer, Flanders, April, 1917



Quick Rating to Fly: **Easy**

Introduction

This guide is to provide insight into the current Flight Model of P3 OFF HITR Sopwith 1 ½ Strutter. General Characteristics of the craft, strengths and weaknesses, take off, landing, and manoeuvring. Bombing and fighting tactics are covered. There is a Workshop selection of Flight model; Easy, Medium, and Realistic. This guide is written for the **Realistic** settings, but applicable to all settings. In addition your PC capabilities may affect the aircraft capabilities.

General Characteristics

Welcome fellow pilots. This manual is for you lucky blokes who have been assigned to the Navy Bomber Squadron. We are currently using the dependable Sopwith 1 1/2 Strutter. She's not fast, but she will get you about, and home again. She handles a bit like a boat but if you push her hard into a turn, she'll get you through. Your work will take you far into Germany on recon and observation runs. Make sure you have a good working arrangement with your observer. Your Strutter is the first British aircraft to feature a synchronized machine gun, so make good use of it!

Pre-flight and Take-off

Ensure you don't have too much fuel (*select the "Ammo/ Fuel, in Workshops rather than Personal Skin*). As your mission takes you into enemy territory, take only the fuel you require for your patrol, to conserve weight. Vision forward is a bit dodgy, so you will need to look past the main front strut to the Left or Right space to make sure your take off is clear. Throttle, (*OFF will start at a 10 %% throttle default on the ground*), so gradually increase to full. She has good manners and will get you off the ground at 46 mph. Slight Right rudder will be all you need. Maximum climb out is at 18 degrees pitch @ 55 mph, but better to keep your speed at 65. She will feel a smidge tail heavy. You will need to get her flying near level at some 3 degrees nose up, to be effective. (*CFS3 setting's will provide you with the ability to trim out by cancelling the "Num Lock" key, and use No "7" some 5-7 taps to adjustment, and if too much, No "1" to decrease pitch down. Trim %Elev + 2.86, which is can be found on the "Z" key to get the feel of where she should be. Auto trim is a consideration when on a long patrol but of course, this removes the immersion factor*).

If a forced landing has been required, when taking off again, weave the craft, looking to the left and right, to enable you to see ahead.

Normal Flight

She is quite stable in flight, and will plod along quite nicely. (*To practice select Quick Scenario's, Free Flight*). She will climb out at some 27 degrees, at some 42 mph, but will sink and spin to the left at anything more. She will need a slight Right rudder to keep her straight, and will sail along at some 93 mph. As she passes through 6000', 7000' and 8000' you will drop ~ 100 rpm. I see no need to lean her out at this point. If your RPM drops below 1000, lean her out in increments (*Keyboard = Ctrl + to enrich, or Ctrl - to lean*.) You can loop her at 75 mph, loose only 100", and as you come out, centrifugal force will require that you apply right rudder to bring her around in a complete circle.

Combat (Air)

You will of course have a run in with Archie, (Flak), and generally speaking it will only down ~1 in 10 pilots. That being said, ground fire from an Observation Balloon, or Aerodrome, will be considerably worse. Don't muck about. It is a good idea to weave your course, and altitude when you encounter such.

You will keep a keen eye out at all times. While she isn't a scout, you can take her into battle, if you aren't carrying ordinance. If you are over enemy lines with a load of ordinance, drop it immediately if you see enemy scouts approaching, unless you have an escort. Next, get your lads together and you can circle in a group, (*hit repeatedly, and turn no more than 1 degree in heading, per second,*) or make for the Front. (*Because of CFS3 AI programming, if the enemy comes directly onto your aft, the Observer may not fire a bullet. It does seem a standard that the AI will want to attack from a higher angle, and not be directly behind you. They will also be rue to continue any attack from your six, and look for deflection shots instead.*) Tactics then are as follows. Against the Albatross D II you can match its turn, and stay on its tail. Dive to get speed, then pull up and fire into the bottom of the fuselage. If you stay on its tail, throttle back to glide and shoot with your forward gun. Using the ailerons, roll Right or Left, which enables your Observer have a go at him. (*The field of fire generally is limited and they will not wish to fire above about 45 degrees and from 45 to 315 degrees laterally. Similarly, about 60 degrees shooting below the horizontal, so you need to angle your craft to give a better shot - Info kindly provided by "BULLETHEAD"*) The DIII is a bit faster, and will climb out higher. Keep an eye on it as it will want to dive onto you. If your observer starts firing the machine gun, it is a very good clue the enemy is making a run at you from aft, and not particularly your six.

Ensure you are vigil in ensuring you do not take machine gun fire into your ailerons, (or yourself). If you lose your ailerons, turn back to the Allied side of the Front, or the nearest Allied base. The King has paid handsomely for your training and your aircraft; preserve both.

Bombing (Ground)

Be aware of your speed in any Ground attack, and always have 400' below you as a safety factor. Your load out is a maximum of 4 bombs. I tend to have at least 6000' when going over the Front to mitigate Flak. (*While about 5 miles out I engage - Shift -CTRL- A, and punch "R" several times, which will bring your wingmen to your altitude, and align them on your six*) Plan your approach to enable you to have the most direct and safest route back to our lines. This may mean that you may have to start your run past your target from the North side. As I approach the target I look to drop down to 3000 feet, just out of effective machine gun fire. (*Before making your final run disengage Auto pilot - Shift-Ctrl- A, and push 'R' again*) When you are less than 2000 yards from your target, throttle back% Ensure your airspeed doesn't get much above 120 mph as you dive toward your mark. Give the signal to attack (A). I then use my air brake, to get the correct bearing, and keep my speed down, with throttle at ready, don't do less than 80 mph. (*Air brake is "D" on the keyboard to activate, and "D" again to counter*). As you approach at

height of some 1000 ft disengage the air brake, release the bombs, (*British method courtesy of "BALDRIC" - That Looks About Right*). Ensure full throttle weaving away from any AA fire, and slowly trading off speed for height, and make for the Front. Bring your wingmen around (*with "Shift-Ctrl-A" & "R"*) There are other sources for such info, and this guide considers the principle of get in, get out, run like hell!

Landing

On approach see your pathway on the ground. Do avoid the pole placed on the field, near the third tent. Approach is quite easy as you throttle down to some 60 mph. You should be over the field now at no higher than 300 feet. When some 400 yards feet away from the tents, throttle back completely, (*or use the mags and blip on and off - see RAF _Louvert description*), and ensure you are only a few feet off the ground. At some 200 yards from the tents, put her down. Cut the engine and flare out by pulling back on the stick and touch down at about 45 mph. You will roll for some 40 - 50 yards. Know where you are headed, as you will not be able to see over the cowling. If need be start the engine again and weave your way to your hanger.

Advanced Tactics

Use your Observer to your advantage. (*The AI are quite adept, and although you can fire at a greater angle of degree with the gun, they are far more accurate than yourself. Once you have crippled the enemy aircraft, manoeuvre beside them, no more than 200 yards from their Right or Left side, paralleling their flight path, and rolling Left or Right. Your Observer will be able to swing the machine gun fully perpendicular to the aircraft, and inflict critical damage to the enemy. Be sure not to get in front of said aircraft, as then they will look to inflict similar damage to you.*

Cheers then and good luck.

Statistics

Courtesy of <http://www.worldwar1.com/dbc/sopwstru.htm>

Engine	145 hp Clerget 9Bc
Weight Empty	1,159 lbs.
Military Load	265 lbs.
Crew	353 lbs.
Fuel	264 lbs.

Weight Loaded	2,041 lbs.
Maximum Speed at: 6,500 ft.	104 miles per hour
Maximum Speed at: 10,500 ft.	100 miles per hour
Maximum Speed at: 13,000 ft.	93 miles per hour
Climb to: 5,000 ft.	12 min. 45 sec.
Climb to 10,000 ft.	23 min. 40 sec.
Wing Span	33 ft. 3 inches
Length	25 ft. 3 inches
Height	10 ft. 3 inches
Armament	One Vickers for the pilot and one Lewis gun on either a Nieuport Ring or a No. 2 Scarff Ring Mount for the Observer
Bomb Load	Four 25 lb. Bombs