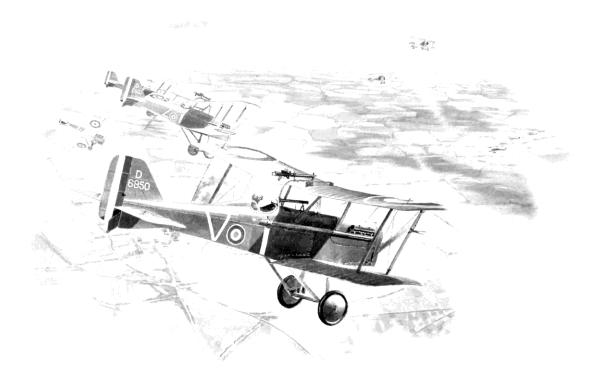
Flying and Air Fighting in the (Scout Experimental) SE5 & SE5a Over Flander's Fields

A Guide for Pilots By Flight Lieutenant Alistar J. Thornhill III, RFC 56 Sqn, Liettres, Flanders, August 1917 Squadron Commander Major Richard G Blomfield



Quick Rating to Fly: Easy+

Introduction

This guide is to provide insight into the current Flight Model of the P 3 OFF SE5a. Characteristics of the craft, strengths and weaknesses, take off, landing, and manoeuvring, will be covered. Dog fighting tactics, the advantage Lewis and Vickers one-two punch, are discussed. There is a Workshop selection of Flight Model; Easy, Medium, and Realistic. This guide is written for the Realistic Settings, but generally applicable to all settings. In addition your PC capabilities may in turn, have some effect on what you see on the Monitor. The OFF edition aircraft SE5 and SE5a are identical.

General Characteristics

Good morning. You've all got your "Wings" so welcome to No. 56 Sqn where our girl is the Royal Aircraft Factory SE5a. She may not look as pretty as those Neiuports, but then looks are deceiving. She's more than capable, with a powerful 8 cylinder Hispano-Suiza engine that generates enough power to be one of the fastest in the skies, like a silk cat. Yes, I like that, a silk cat, smooth and fast. You can almost fly her hands off, and she is structurally sound as she is stable. Tactics with her are a bit of dive, turn, engage, and then speed to safety. She's most forgiving, and will always treat you right. Make sure you do the same.

Pre-flight and Take-off

The Fitters and Riggers will make sure she's ready to go. You are responsible for ensuring you have adequate fuel and ammunition (select the "Ammo/Fuel" in Workshops rather than "Personal Skin"). She will burn about 1/12 of a tank per 25 miles and/or 15 minutes. You will be conducting most of your missions over the lines, so you need to consider your fuel load if carrying any loadout, or engaging the Hun on your mission. Throttling her up, (OFF will start at a 10% throttle default on the ground) she is quite tame and no special action is required. Check all your gauges to ensure she's ticketyboo, and when she's warmed up, gradually throttle her up, from your take off point. Acceleration is smooth and she will get her back end up at 55 mph, and then up in the air at 60. As you climb out (at about 10 - 15 degrees pitch) after you're up to 500 ft you will need to make a few adjustments. (With the [Z] key on your keyboard enabled, you will find a plethora of information available. You will need to adjust the [TRIM ELEV] to -5.29 or she will be in a tail down position. Then adjust the [BANK], to the Right with your Joystick, some - 0.25. These settings will give you almost no Pitch aka Climb). She will also need just tad of Right rudder, and slight forward pressure on the stick, and "Bob's your uncle" you're ready. She will now climb out steady at some 80 mph, ([Z] Key - this is a PITCH of some 10 degrees for your best climb ratio. If you climb out steeper than 28 degrees + she will stall out at 37 mph with Right rudder needed, and at 32, sink, stall and spin Left, with loss of up to some 300 ft in altitude.

Normal Flight

As always practice makes perfect so I suggest some flights about the field before combat. (This can be done by selecting "Quick Scenarios", "Quick Combat", and "Pilot Never Dies". You can barrel roll her and know you've done a good job if you lose less than 50 ft in height! Correct mixture adjustment is aimed at keeping your RPM at 1620 (a sweet purring sound) starting as you go through 5500 ft. At this elevation you can lean her out a bit, and then again every 500 ft until the mixture control lever is about half way aft, good for 8000 ft+. (This is done by pressing [SHIFT -] to lean, about 5 or so taps per 500 ft.) When dropping altitude, especially in a scrap, don't forget to enrich your mixture, or she will stall on you. (This is done by tapping, usually vigorously, [SHIFT +] to enrich). (Autopilot [SHIFT CTRL A], is a consideration for a long flight but can be deleterious if you're attacked, and is not considered a Realistic SIA setting save for commanding Wingmen on a bombing run).

Combat (Air)

Right then, it's about keeping an eye out for the Hun, and your mind on your mission. (If you just have a hat switch and not TIR, you will miss the enemy diving at you from your six, at about a 65 degree angle. To sort this out you will need to pitch the craft up and down whilst looking forward, and behind. The telltale effect of the enemy's bullets ripping into your craft is a very good clue that the enemy has found you. Speed is your asset as the Germans don't have any aircraft that can match the SE's. If you are attacked from above/behind dive down and away from the direction of attack, to give yourself some space. I have had her up to 225 mph (max speed 244 in OFF) at which time you do start to get the wing fabric buckling a wee bit. Don't be afraid to give her hard left or right rudder, throttle back, then full throttle to pull out of the turn. Now that you have some distance between yourself and the Hun, get some altitude back and engage the enemy in a semi frontal attack. Pick Left or Right or wait and see which side they go. Now back on the throttle and hard rudder and ailerons to get on their six, then up the throttle again to pursue. You have a mite bit better turning radius than the Alb D.III. When you are some 200 yards behind, watch your speed and close in. You will need to throttle back and kick the rudder Left or Right, at 100 yards away, or you will overshoot the mark, leaving your six, (backside) exposed. Short bursts of some 5 - 10 rounds per go is the best method. This means you must be in close, say 60 yds from your target. Short bursts may also prevent gun jams, which can put you in a right pickle. Another tactic is to do a quick dive then a roll so as not to lose too much altitude, and bank hard Left or Right. Aiming is pretty straight forward as you sight down the tube. If one gun jams at least you have the other. Pull away from the dogfight and look to clear the jam (which in OFF may be a time delay only).

Let your Wingmen know your intentions by signalling them. (*They can be directed by the following keyboard commands:* [R] = Rejoin, [A] = Attack, [H] = Help - this will bring your Wingman in, and by going to Autopilot, [SHIFT CTRL A] will align the boys behind you.

Combat (Ground)

We chatted about directing your Wingmen on a Mission, so now about the nuts and bolts. (When you come to a Waypoint, hit [R] repeatedly, and turn no more than 1 degree in heading per second, which will bring your Wingman around with you.)

She will carry 4 bombs, at some 100 lbs of extra weight, so be aware that your aircraft manoeuvrability will be significantly affected. Watch your speed in any Ground attack, and always have 400 ft below you as a safety factor. I tend to have at least 6000 ft 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 or East 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 Autopilot [SHIFT CTRL A] and push [R] several times*). When you are less than 2000 yards from your target, throttle back to 10% Additionally you can bleed off speed with full ailerons and opposite full rudder. I always like to be at 100 mph as this consistency gives me a good bench mark to know where my bombs should land. Give the signal to attack [*A*] as you approach a height of some 1000 ft release the bombs. (*You can use the British method courtesy of BALDRIC - That Looks About Right*). Once you have laid your eggs, ensure full throttle weaving away from any Archie and slowly trading off speed for height as you make for the Front. Bring your wingmen around *with a hand signal (ISHIFT CTRL A] or [R] or [H]* as we consider the principle of; get in, get out, run like hell!

If jumped by enemy Scouts do your best to carry on, but if you must, drop the ordinance in a safe manner, and engage the enemy.

Landing

Point the aircraft in a downward angle some 15 degrees and Using full ailerons and full opposite rudder you can bleed off speed and height as you side slip into position. On approach you should be at no higher than 300 ft and 70 mph as you cross the beginning of the field. When some 400 yards away from the hangers, throttle back completely (*or use the mags and blip on and off - see RAF_Louvert's description*) and ensure you are only a few feet off the ground. When some 300 yards away and just a few feet off the ground, with air speed at about 60 mph, put her down by cutting the engine and flare out by pulling back on the stick. From this landing speed you will roll about 300 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. Do avoid the pole placed on the field, near the third tent.

Thanks then lads, any questions?

<u>Statistics</u>

http://www.flugzeuginfo.net/acdata_php/acdata_raf_se5_en.php

Crew	l	
Propulsion	1 Piston	Engine
-	l Piston Engine	
Engine Model	H ispano-Sui za 8b	
Engine Power	149 kW	200 h p
Speed	222 km/h	120 kts 138 m p h
Service Ceiling	6,706 m	22.000 ft
Rang e	483 km	261 NM 300 mi.
Empty Weight	639 kg	1,409 lbs
Max. Takeoff Weight	902 kg	1,989 lbs
Wing Span	8.12 m	26.6 ft
Wing Area	22,7 m²	244 ft²
Length	6 . 38 m	20.9 ft
Height	2 . 90 m	9.5 ft
First Flight	22.11.1916	
Production Status	out of production	
Total Production	5205	