# **Schweitzer 300C Start-up Manual**



Caleb Hagan

Table of Contents iii

# **Table of Contents**

Table of Contents	ii
Introduction	<i>\</i>
Before Engine Start	3
Engine Start	
Started Engine	11
Index	13
Glossary	15

Introduction

#### Introduction

The following manual was created to assist the students of Longhorn Helicopters in learning the proper procedures of starting up the Schweitzer 300C aircraft. The ability to be familiar with the instrument panel of the aircraft is essential to proper operation as well as learning how to fly. This manual will show step by step instructions on how to start a Schweitzer 300C along with pictures to use as reference.

The author intends for this manual to be used by any individual who flies or that wants to fly a Schweitzer 300C.

This manual is no replacement for preflight checklists or training, it is meant for use only as a study guide and training aid.

Words that are highlighted in blue are defined in the glossary.

Before Engine Start 3

#### **Before Engine Start**

This section of the guide will walk you through all steps that must be done prior to starting the engine.

1. Give passenger briefing



2. Switch battery switch (BAT) to the "On" position



- 3. Switch anti-collision light (BEACON) switch to the "On" Position
- 4. Check to make sure the beacon, switches, and instruments are working properly.



5. Check your fuel quantity



6. Set the control frictions to off

Before Engine Start 5



- 7. Check flight controls by moving collective and cyclic in all ranges of motion.
- 8. Check control trim



9. Set control friction to on

Engine Start 7

# **Engine Start**

This section guide shows you how to start the engine after completing the checks.



1. Set the fuel shut off to full in



2. Open (roll) the throttle to  $\frac{1}{4}$ 



3. Pull the mixture out to full rich



- 4. Turn on fuel boost pump for 2-3 seconds to verify pressure
- 5. Turn off fuel boost pump

Engine Start 9

#### 6. Set mixture to idle cut-off



- 7. Turn on both magnetos
- 8. Close the throttle completely
- 9. Open the throttle to 1/8



10. Engage the starter (button inside collective)

Started Engine 11

# **Started Engine**

This section will guide you on what to do following the engine being started.



1. Set mixture to full rich



2. Set throttle to 1400 RPM



3. Check oil pressure to ensure proper operating pressure



- 4. Turn alternator (ALT) on and verify it is charging
- 5. Turn fuel boost pump on
- 6. Place avionics master switch in the on position

Index 13

# Index

Collective, 5
control friction, 5
Cyclic, 5
flight controls, 5
fuel, 4, 9, 16
fuel boost pump, 10, 16

Fuel Boost Pump, 10 mixture, 10, 11, 15 oil pressure, 16 throttle, 9, 11, 15 trim, 5

Glossary 15

#### Glossary

Control Frictions- control used to prevent accident movement of the collective

Throttle- Controls the power in the aircraft to keep rotor RPM inside allowable limits

Magnetos- Electrical generator used to create electricity for the sparkplugs

Avionics Master Switch- Master control switch that turns on and off all avionics systems

Flight Controls- Control inputs of the aircraft, consisting of the cyclic, collective, and pedals