Chapter 03

MODEL DESCRIPTIONS

INTENTIONALLY LEFT BLANK

LIST OF EFFECTIVE PAGES			
Chapter	**Section**	**Page**	**Date**
03	03-Title	1	January 23, 2012
		2	January 23, 2012
	03 -LOEP	1	January 23, 2012
		2	January 23, 2012
	03 -TOC	1	January 23, 2012
		2	January 23, 2012
	03-00	1	January 23, 2012
		2	January 23, 2012
		3	January 23, 2012
		4	January 23, 2012

INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

INTENTIONALLY LEFT BLANK

03 MODEL DESCRIPTIONS

1.0 GENERAL

As noted in Chapter 1 this Airplane Maintenance Manual is applicable to the following airplanes manufactured by Found Aircraft Canada:

FBA-2C1 “Bush Hawk”
FBA-2C2 “Bush Hawk XP”
FBA-2C3 “Expedition”
FBA-2C4 “Bigfoot”
FBA-2C3T
FBA-2C4T

All six models are a five seat, high-wing, single engine, monoplanes.

The principals of construction of the primary structure are identical for all six models. For example, the wing, aft fuselage, and empennage are all semi-monoque aluminum structures, while the forward fuselage is a welded steel tube structure.

The flight control system uses conventional ailerons, elevator and rudder. The pitch trim is provided by a trim-able horizontal stabilizer.

The airplanes are equipped with four large doors, 2 front and two rear doors. Each door has a large window that provides the pilot and passengers with excellent visibility.

2.0 FBA-2C1 AND FBA-2C2

The only difference between the 2C1 and 2C2 is the flap system. The 2C1 is equipped with a manually operated plain flap while the 2C2 is equipped with an electrically operated Fowler flap. Found Aircraft Canada (FAC) has designed a mod that allows the plain flap system on the 2C1 to be replaced with the Fowler flap system. This modification is designated as Mod 1043.
Aircraft serial numbers 28, 31 through 60 have had Mod 1043 incorporated at FAC, leaving only serial numbers 29 and 30 as the only plain flap aircraft.

The landing gear is arranged in a “fixed tail-dragger” configuration. The main gear legs are rigid welded steel structures. The legs are “pinned” to a box beam that spans the fuselage. A stack of elastomer “pucks” located between the upper end of the leg and the box beam act as shock absorbers. The steer-able tail wheel is attached to a tubular steel “stinger” mounted to the aft fuselage. The tail wheel is designed to caster when a side load is applied to the wheel. This feature allows the pilot to minimize the turn radius of the airplane.

The airplanes are equipped with a 300 hp Lycoming IO-540-L1C5 engine.

The airplanes may be equipped with either of the following propellers:

82” Diameter Hartzell 3-blade variable pitch HC-C3YR-1RF/ F8068
84” Diameter Hartzell 3-blade variable pitch HC-C3YR-1RF/ F8468A-2R

3.0 FBA-2C3

The 2C3 is a tricycle gear version of the 2C2 “tail dragger” airplane. The design of the 2C3 main landing gear follows the conventional cantilevered spring design used by many airplanes. The main legs are tapered steel tubes of circular cross-section connected to a ‘cross tube’ spanning the width of the fuselage. The landing loads are transferred from the gear legs into the fuselage via trunnions that pivot in weldments in the steel tube fuselage. Because the trunnions rotate freely, bending moments from the main legs are transferred directly into the cross tube.
The nose gear installation is comprised of an articulated strut with elastomer compression pucks providing energy absorption and a free castering nose wheel. The carriage structure for the nose gear is a triangulated arrangement of welded steel tubes that transfer the landing and taxiing loads to the steel tube fuselage via the engine mount.

The 2C3 is equipped with a Lycoming IO-580-B1A engine rated at 315 hp.

The 2C3 is equipped with the following propeller:

82” Diameter Hartzell 3-blade variable pitch HC-C3YR-1RF/ F8068

4.0 FBA-2C4

The 2C4 is a “tail-dragger” version of the 2C3.
It has the same basic landing gear as the FBA-2C2 with two exceptions. The “socket” type axle on the 2C2 main gear leg is replaced with a “bolted-plate” type axle. The “bolted-plate” type axle is secured to a plate at the base of the leg with four bolts. This design has an advantage in that tapered shims can be installed between the axle and the leg to allow adjustment of the camber and/or toe-in of the wheel. The “bolted-plate” type axle is also used on the 2C3 main gear which makes for commonality of parts. The 2C4 has a heavy duty tail wheel assembly to account for its higher gross weight.

5.0 FBA-2C3T

The 2C3T is a modified version of the 2C3 airplane. The 2C3T has the same airframe aft of the firewall as the 2C3.

The 2C3T is equipped with a Lycoming TIO-540-AH1A turbocharged engine rated at 300 hp.

The 2C3T is equipped with the following propeller:

84” Diameter Hartzell 3-blade variable pitch HC-C3YR-1RF/F8068+2

The maintenance instructions for the 2C3T engine installation are contained in supplement P/N FAC2-M540T.

.

6.0 FBA-2C4T

The 2C4T is a modified version of the 2C4 airplane. The 2C4T has the same airframe aft of the firewall as the 2C4.

The 2C4T is equipped with a Lycoming TIO-540-AH1A turbocharged engine rated at 300 hp.

The 2C4T is equipped with the following propeller:

84” Diameter Hartzell 3-blade variable pitch HC-C3YR-1RF/F8068+2

The maintenance instructions for the 2C4T engine installation are contained in supplement P/N FAC2-M540T.

INTENTIONALLY LEFT BLANK