

Transport Canada Approved Flight Manual Supplement

For

**FULL SPAN VORTEX GENERATORS AND
SWEPT WINGTIP EXTENSION MOD
(VG/WING TIP MOD)**

This supplemental manual is applicable to VG/Wing Tip equipped FBA-2C2 airplanes or VG/Wing Tip equipped FBA-2C1 airplanes with Mod 1043 installed. Mod 1043 replaces the plain flap system on the model FBA-2C1 airplane with a slotted Fowler-type flap system (commonly referred to as "Fowler Flaps"). Therefore where 2C2 is used in this manual it is acceptable to read 2C1 with Mod 1043 installed.

This Supplement must be attached to the Transport Canada Approved Airplane Flight Manual when the airplane is modified by the installation of the VG/Wing Tip Mod in accordance with Found Aircraft Canada drawing D259 Issue 1, D261 Issue 1, D263 Issue 1 or later approved revision.

The information contained herein supplements or supersedes the basic flight manual, airplane markings and/or placards only in those areas listed herein.

For Limitations, Procedures, and Performance information not contained in this Supplement, consult the airplane markings and placards and/or basic Airplane Flight Manual, (P/N: FAC2-M400).

Approved:



Date:

09 NOV. 2005

P/N M400-S14

LOG OF REVISIONS

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SECTION 1 GENERAL

INTRODUCTION

This supplemental manual is applicable to FBA-2C2 and FBA-2C1 airplanes (with Mod 1043) equipped with the VG/Wing Tip Mod. Mod 1043 replaces the plain flap system on the model FBA-2C1 airplane with a slotted Fowler-type flap system (commonly referred to as “Fowler Flaps”). Therefore where 2C2 is used in this manual it is acceptable to read 2C1 with Mod 1043 installed.

This mod consists of 72 vortex generators (VGs) on the upper surface of the wing and swept wing tips. The VGs start at the fuel filler cap and run outboard to the tip. The swept wing tips increase the span of the wing by approximately two feet.

This supplement is applicable to all landing gear configurations.

This supplement provides information and limitations not included in the Transport Canada approved markings and placards, and/or Airplane Flight Manual (P/N: FAC2-M400) and respective Flight Manual Supplements for appropriate landing gear configuration.

The aircraft is to be operated under the “NORMAL CATEGORY” only.

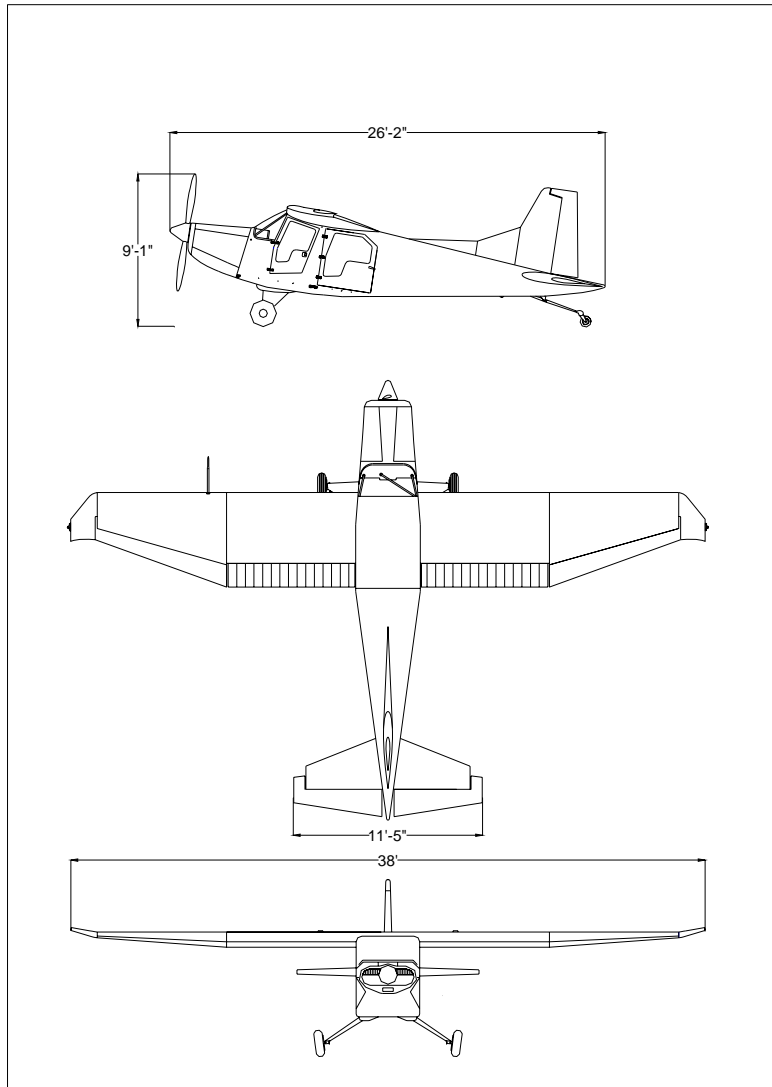


Figure 1 Three View - Landplane

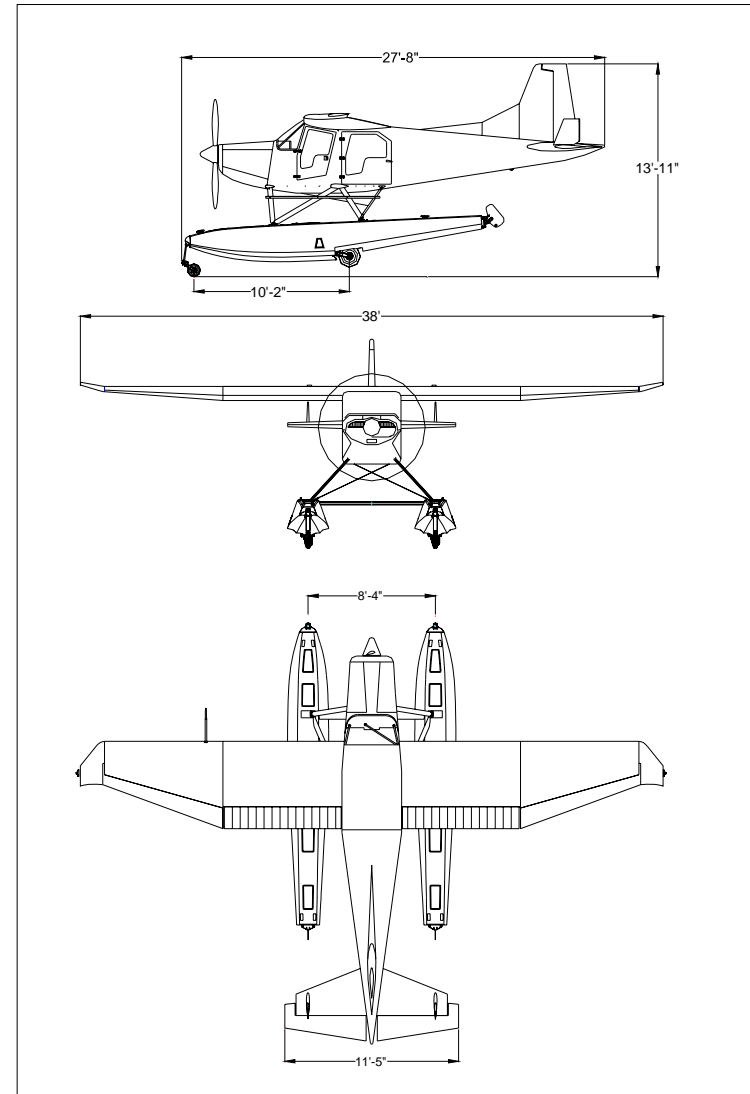


Figure 2 Three View – Aerocet 3400 Amphibious Floatplane

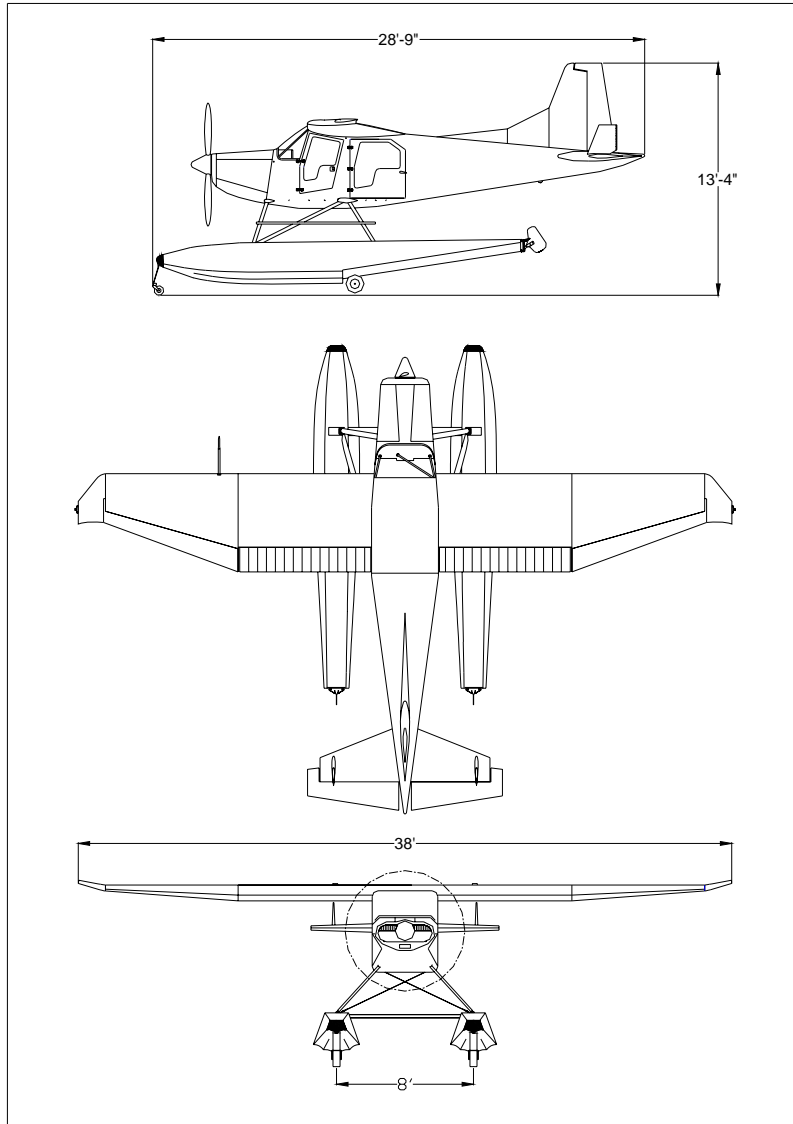


Figure 3 Three View – Wipline 3450 Amphibious Floatplane

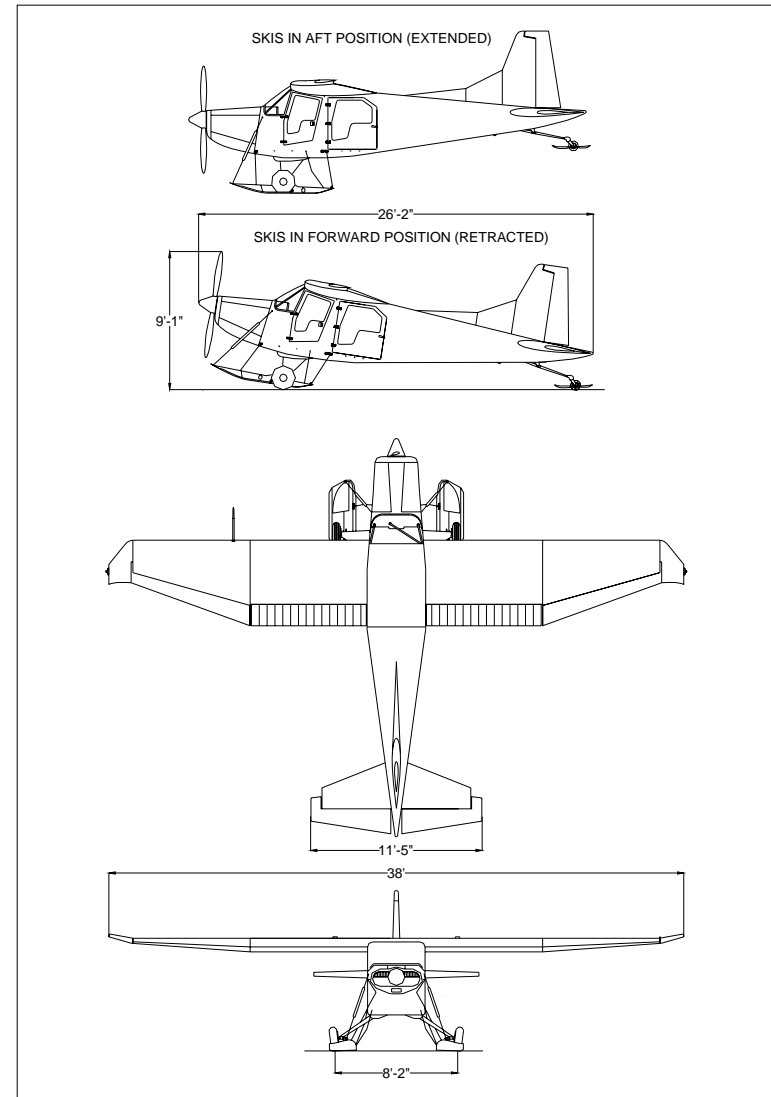


Figure 4 Three View – Wipline/Fluidyne/Federal C3200/C3600 Skiplane

VG LOCATION

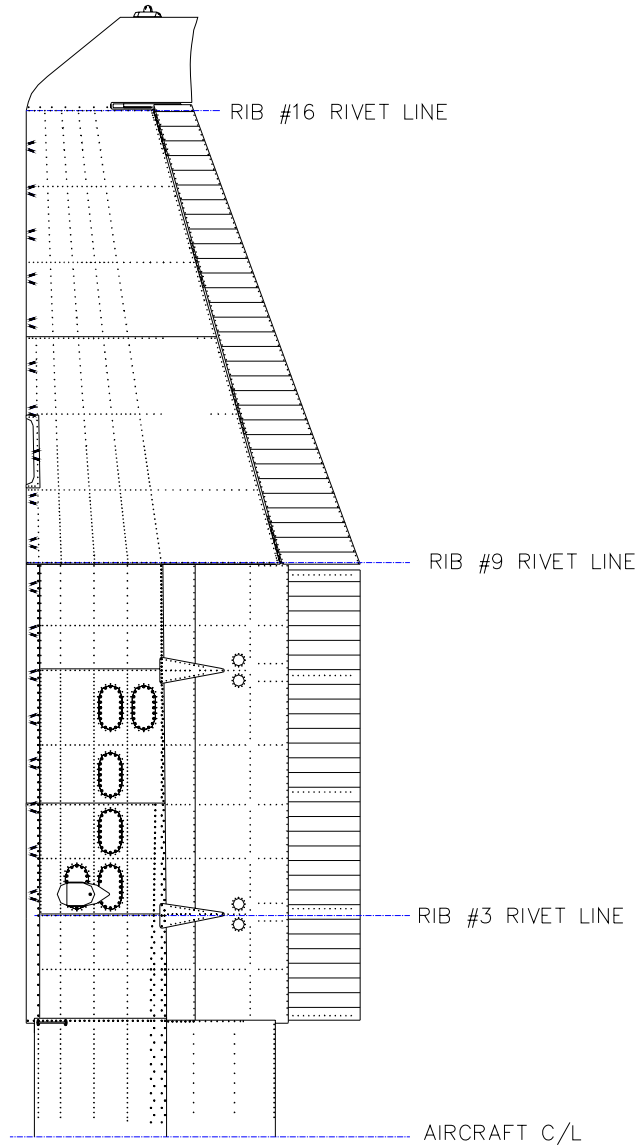
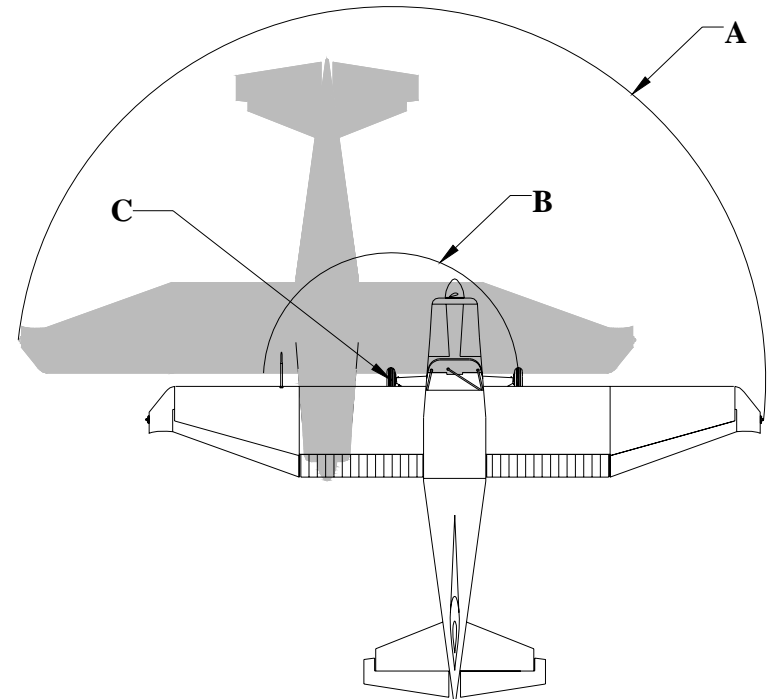


Figure 5 VG Location (Starboard Wing - Shown, 36 VGs per wing)

GROUND TURNING CLEARANCE



- “A” – Radius for wing tip ----- 23.5 ft.
- “B” – Radius for outside gear ----- Unchanged
- “C” – Radius for inside gear ----- Unchanged

**TURNING RADII ARE CALCULATED USING ONE
BRAKE AND PARTIAL POWER. ACTUAL TURNING
RADIUS MAY VARY AS MUCH AS THREE FEET.**

DESCRIPTIVE DATA

MAXIMUM CERTIFICATED WEIGHTS

Unchanged.

STANDARD AIRPLANE WEIGHTS

Unchanged.

SPECIFIC LOADINGS

Wing Loading:

- 17.4 lbs/sq.ft. (for 3200 lbs GW skiplane)
- 19.0 lbs/sq.ft. (for 3500 lbs GW landplane)
- 19.0 lbs/sq.ft. (for 3500 lbs GW skiplane)
- 19.6 lbs/sq.ft. (for 3600 lbs GW floatplane)
- 20.1 lbs/sq.ft. (for 3700 lbs GW floatplane)
- 20.5 lbs/sq.ft. (for 3775 lbs GW floatplane)
- 20.7 lbs/sq.ft. (for 3800 lbs GW floatplane)

Power Loading: Unchanged

SECTION 2 LIMITATIONS

INTRODUCTION

The FBA-2C2 Bush Hawk-XP equipped with the VG/Wing Tip Mod must be operated in accordance with the limitations contained in this section. These include operating limitations, instrument markings, colour coding and basic placards, powerplant, systems and equipment limitations.

AIRSPEED LIMITATIONS

Unchanged.

NOTE

Since the airspeed calibration is not appreciably changed by the VG/Wing Tip Mod, no changes to the airspeed indicator markings have been made.

WEIGHT LIMITS

Unchanged.

CENTER-OF-GRAVITY LIMITS

Unchanged.

OTHER LIMITATIONS

Unchanged.

PLACARDS

The following information is displayed in the form of composite or individual placards.

1. In clear view of the pilot:

This aircraft is airworthy with up to 4 VGs missing per wing. The upper wing surface must be inspected prior to each flight to verify that no more than 4 VGs per wing are missing or damaged.

The total number of VGs is 72 (36 per side).

The VGs start at the fuel filler cap (near Rib #3) and run outboard to rib #16 where the swept wingtip extension is attached to the main wing. See Figure 5 (page 9) for VG location.

FOUND
FBA-2C2

SUPPLEMENT M400-S14
FULL SPAN VGS & SWEPT WINGTIP EXTENSION

SECTION 3

EMERGENCY PROCEDURES

Unchanged.

SECTION 4
NORMAL PROCEDURES

Unchanged.

SECTION 5 PERFORMANCE

HEIGHT LOSS IN STALLS

The height loss in stalls maybe up to 100 ft.

Although there are noticeable performance improvements due to the VG/Wing Tip Mod, no credit is taken. Therefore, there are no changes to the performance charts for each landing gear configuration.

AIRSPPEED CALIBRATION

The airspeed calibration is not appreciably changed due to the VG/Wing Tip Mod.

STALL SPEED AT GW

Unchanged.

BEST ANGLE-OF-CLIMB AT GW

Unchanged.

BEST RATE-OF-CLIMB AT GW

Unchanged.

TIME, FUEL AND DISTANCE TO CLIMB AT GW

Unchanged.

SECTION 6

WEIGHT AND BALANCE

There are no changes in this section due to the installation of the VG/Wing Tip Mod. Refer to the airplane flight manual and/or applicable flight manual supplements for the appropriate loading information and limitations.

WARNING

IT IS THE RESPONSIBILITY OF THE AIRPLANE OWNER
AND PILOT TO ENSURE THAT THE AIRPLANE IS LOADED
PROPERLY.

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