

SECTION 1: GENERAL

No Change.

SECTION 2: LIMITATIONS

No Change Except:

AIRSPPEED LIMITATIONS

Maximum Flap Extension Speed  $10^{\circ}$  -  $30^{\circ}$ : 109 KIAS

AIRSPPEED INDICATOR MARKINGS

White Arc 54 to 109 KIAS  
Full Flap Operating Range

CENTER OF GRAVITY LIMITS

C.G. Limits remain the same, except for:

(+51) at 3800 Lbs. or less (Aft Limit)

PLACARDS:

A. Flap speed placard near flap selector:

Flaps  $0^{\circ}$  to  $10^{\circ}$ : No Change.

Flaps  $10^{\circ}$  to  $30^{\circ}$ : White Band 109 KIAS

B. Placard - Weight and Balance (Two required)

Install one in full view of pilot.  
Install another in rear baggage compartment.

"For proper weight and balance consult the revised center of gravity envelope per STC SA756NW.

SECTION 3: EMERGENCY PROCEDURES

No Changes.

SECTION 4: NORMAL PROCEDURES

No Changes Except:

SPEEDS FOR NORMAL OPERATION

Takeoff:

Short Field Takeoff, Flaps 20°, Speed  
at 50 Feet - - - - - 69 KIAS

Landing Approach (3800 Lbs.):

Short Field Approach, Flaps 30° - - - - - 70 KIAS

SHORT FIELD TAKEOFF

1. Wing Flaps - - - - - 20°
2. Brakes - - - - - Apply.
3. Power - - - - - Full Throttle and 2850 RPM.
4. Mixture - - - - - Rich (Lean for field elevation per Fuel Flow Placard above 3000 Feet).
5. Brakes - - - - - Release.
6. Elevator - - - - - Lift nose wheel at 60 KIAS.
7. Climb Speed - - - - - 66 KIAS. Until all obstacles are cleared.
8. Landing Gear - - - - - Retract after obstacles are cleared.
9. Wing Flaps - - - - - Retract after reaching 80 KIAS.

NOTE

Do not reduce power until wing flaps and landing gear have been retracted.

BEFORE LANDING

No Change Except:

Wing Flaps -- 10° to 30° Below 109 KIAS.

SECTION 5: PERFORMANCE

No Changes Except:

FIGURE

1. Airspeed Calibration, Normal Static.

5-1

2. Stall Speed.

5-2

SECTION 6: WEIGHT & BALANCE

See FAA Form 337 in the airplane records for the Weight and C.G. of the weight added for this modification.

Installation of this Robertson Droop Aileron System requires that the Aft C.G. Limit be moved FWD to STA. 51.0". Revise existing Weight and Balance chart accordingly.

CENTER OF GRAVITY LIMITS

C.G. Limits remain the same, except for:  
(+51) at 3800 Lbs. or less (Aft Limit)

SECTION 7: SYSTEMS DESCRIPTION

No Change Except:

The Robertson System includes the installation of a flap activated aileron droop, stall fences and leading edge stall strips.

SECTION 8: HANDLING, SERVICING AND MAINTENANCE

No Change.

SECTION 9: SUPPLEMENTS

No Change.

AIRSPEED CALIBRATION  
Normal Static Source

Conditions:

3800 Lbs.

Power required for level flight or maximum power during decent.

Flaps Up Airspeed Calibration is Not Changed, See Basic P.O.H.

Flaps 10°	
KIAS	66 71 82 93 103 113 123 133 142 152
KCAS	65 70 80 90 100 110 120 130 140 150
Flaps 20°	
KIAS	58 68 79 90 101 111
KCAS	60 70 80 90 100 110
Flaps 30°	
KIAS	58 69 80 90 100 111
KCAS	60 70 80 90 100 110

Figure 5-1

STALL SPEEDS

Conditions:

Power Off.

Gear Up or Down

Most Forward Center of Gravity

Weight Pounds	Flap Deflection	Angle of Bank							
		0°		30°		45°		60°	
		KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS
3800	UP	73	73	78	78	87	87	103	103
	10°	61	62	68	67	76	74	91	88
	20°	57	59	61	63	68	70	83	83
	30°	54	57	59	61	67	68	81	81

Figure 5-2

ROBERTSON 21455  
NO 29309