



SECTION VI FLIGHT CHARACTERISTICS

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STABILITY.

The aircraft has satisfactory stability in all configurations, through all speed ranges. When trimmed the aircraft will normally fly hands off at all speeds within the operating speed range. At speeds other than cruise it is necessary to apply rudder to hold the aircraft on course. The dive recovery characteristics are normal throughout the speed range.

STALLS.

The stall speeds for various gross weights, configurations and angles of bank are shown in figure 6-1.

POWER-ON STALL.

At cruise power and with various flap settings, the stall characteristics do not differ to any great extent, and there is little or no stall warning under these conditions. At the stall, the left wing will drop and the ensuing roll will continue until recovery action is taken; the roll being more pronounced with an aft CG condition.

POWER-OFF STALL.

With the throttle closed, the flap setting does not appreciably alter the stall characteristics. The stall is gentle under all conditions of loading, and the stall warning consists of a slight buffet which increases in intensity with increase

in flap setting. At the maximum gross weight, the stall is sharper. One wing may drop, particularly at the higher gross weights or aft CG condition, but, in all cases, full lateral control will be regained as airspeed is increased.

STALL RECOVERY.

Stall recovery is normal, using aileron and rudder as required, and allowing the control column to move forward. Do not reduce power or move the control column forward further than necessary to increase the airspeed by 4 to 5 knots (5 to 6 mph), otherwise a very steep nose-down attitude will result.

SPINS.

Spins are prohibited. However, in the event of an accidental spin, apply normal recovery procedure, which consists of application of full opposite rudder and moving the control column progressively forward until the spin stops, then centralizing the rudder pedals and easing the aircraft out of the ensuing dive.

FLIGHT CONTROLS.

The flight controls are effective throughout the speed range of the aircraft in all configurations.

RUDDER.

Directional stability and control is good throughout the speed range of the aircraft.

Note

The ground adjustable rudder trim tab must be adjusted when the belly fuel tank is fitted.

stall speed chart

ANGLE OF BANK		0°		15°		30°		45°	
LOAD FACTOR		1.00		1.04		1.15		1.41	
GROSS WEIGHT	WING FLAPS	STALLING AIRSPEED (IAS) - POWER OFF							
		KN	MPH	KN	MPH	KN	MPH	KN	MPH
3600 LB	CRUISE	46	53	47	54	49	56	54	62
	CLIMB	41	48	42	48	44	51	49	56
	TAKE-OFF	37	42	38	43	39	45	44	50
	LANDING	33	38	33	38	35	41	39	45
4400 LB	CRUISE	50	58	51	59	54	62	60	69
	CLIMB	46	53	47	54	49	56	54	62
	TAKE-OFF	41	47	42	48	44	50	48	56
	LANDING	36	42	37	43	39	45	43	50
5100 LB	CRUISE	54	63	55	64	58	67	65	74
	CLIMB	49	57	50	58	53	61	58	67
	TAKE-OFF	44	50	45	51	47	54	52	60
	LANDING	39	45	40	46	42	48	46	54

Figure 6-1

ELEVATOR.

The elevator is effective throughout the speed range of the aircraft.

Trim Tabs.

Trim tabs on the elevators are operated by means of a trim tab wheel on the flight control console.

AILERONS.

Ailerons are effective throughout the speed range of the aircraft down to the stall, with good lateral control. With flaps down (58°) the ailerons droop 15°, providing added lift and aileron control down to the stall.

Aileron Trim Tabs.

A fixed trim tab, adjustable on the ground, is provided on each aileron.

LEVEL FLIGHT CHARACTERISTICS UNDER VARIOUS SPEED CONDITIONS.

The aircraft responds smoothly to flight control movements from cruising to maximum airspeed. To improve flight characteristics when flying slowly, select wing flaps to CLIMB position and reduce airspeed to 65-70 knots (75 to 80 mph) IAS, adjusting power to maintain the desired airspeed; or select wing flaps to LANDING and reduce airspeed to 60-63 knots (69 to 72 mph) IAS, adjusting power to maintain the desired airspeed.