

PART II

LIMITATIONS

A.L.1
Para. 50
and 51 (i)
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50. Engine limitations—Avon Mk. 1

	R.P.M.	J.P.T.
Max. take-off and operational necessity	7,800	600
<i>30 mins. limit</i>	± 50	
Max. continuous	7,600	565
Idling on the ground	2,750	500
	± 100	
Oil pressures		
Minimum idling	3 lb./sq. in.	
Minimum at 7,400 r.p.m. and above ...	15 lb./sq. in.	

51. Flying limitations

- (i) The aircraft is designed as a light bomber. Intentional spinning and aerobatics are not permitted. When carrying wing tip tanks, gentle manoeuvres only are permitted.

(ii) *Speed and Mach number limitations*

Clean aircraft	450 knots
Below 15,000 ft.75M
15,000 to 25,000 ft.79M
Above 25,000 ft.	No limitation
	But see para. 64 (iv)
With wing tip tanks	365 knots or
	.8M
Flaps down	160 knots
Undercarriage down	190 knots

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Bomb doors open	...	350 knots or .75M up to 40,000 ft. .8M above 40,000 ft.
Air brakes out	No limitation
Jettisoning wing tip tanks	...	300 knots or .75M

(iii) *Maximum weights*

For take-off and all permitted forms of flying...	...	46,000 lb.
For landing	31,500 lb.

52. Pilot limitation

Pilots having a thigh length in flying clothing of more than 26.5 inches must not fly the aircraft. This restriction is imposed because personnel with a greater thigh length are liable to injury due to the knees fouling the coaming if the ejector seat is used. All pilots should press the legs back as far as possible if the ejector seat is to be used.

53. Use of AVTAG

AVTAG may be used under the following conditions:—

- (i) It should be realised that a.n.m.p.g. is related to the specific gravity of the fuel used and in consequence where the S.G. of the fuel uplifted is less than 0.8 (the average S.G. of 100 AVTUR) more will be required to fly a given distance than would be the case with 100 AVTUR. This is shown on the Flight Planning Charts.
- (ii) The current jet pipe temperature and engine r.p.m. limitations must not be exceeded. It is to be noted that the change of fuel grade may introduce a tendency to overspeed.

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- (iii) The fuel temperature at the commencement of the flight must not exceed 30°C.
- (iv) The specific gravity of the fuel must be within the range of 0.75 to 0.79 and the engines adjusted accordingly.