



FORM - 100A

FLIGHT CLEARANCE CERTIFICATE

FOR AIRCRAFT

In accordance with IMTAR – 21, Subpart P, 21.P.10

The flying and other LIMITATIONS of _____ are detailed herein:

1. Centre of Gravity Range :

2. Flight Envelope :

For Flight Envelope (Subsonic), Refer Fig-1.

For Design Speed and Mach Number Limits with Altitude, Refer Fig-2. For Values of Load Factor Supersonic case Refer Fig-3.

3. Maximum Limiting Speeds : ☐ Clean' Aircraft

- (a) Max. Speed for ☐ Clean' aircraft with controls in 'Power'
- (b) Max. Speed for ☐ Clean' aircraft with controls in 'Manual'.
- (c) Max. Speed for selecting controls from ☐ Manual' to ☐ Power' or from ☐ Power' to ☐ Manual'.
- (d) Max. Speed for extending Air brakes:
 - (i) With controls in ☐ Power'
 - (ii) With controls in ☐ Manual'.
- (e) Max. speed for operating flaps to Take-off position, including Combat-selection of Flaps.
- (f) Max. speed for operating Flaps to ☐ Landing' position.
- (g) Max. speed for raising or lowering undercarriage.
- (h) Max. speed with undercarriage locked ☐ Down'.

4. Maximum Limiting Speeds for Carriage & Release of External Stores

The speed Limits should be separately stipulated for flying with controls in ☐ Power' and in ☐ Manual'.
Carriage Release

5. Minimum Speeds : ☐ Clean' Aircraft

Buffet :

Minimum Speed (U/C & Flap : UP) :

Minimum Speed (U/P & Flaps : DOWN)

6. Maximum Normal Acceleration : ☐ Clean' Aircraft

Design Value

Flight Test Value

7. Maximum Normal Acceleration with External Stores

The Max. ☐ g' limits should be separately stipulated for flying with controls in ☐ Power' and ☐ Manual'.

External Stores Carried

Max. ☐ g' Permissible

8. Roll Maneuvers Limitation : ☐ Clean' Aircraft

Pure Roll :

Roll Pull-Out :



FORM - 100A

FLIGHT CLEARANCE CERTIFICATE

FOR AIRCRAFT

9. Roll Maneuvers Limitations - External Stores

(Roll Maneuver limitations should be separately stipulated for flying in ☐Power' and ☐Manual')

For Design Limits, See Fig-4 & 5

External Stores carried

Limiting ☐g' / Max. rate of roll in Degree per second

10. Maximum Angle of Side Slip with reference to speed and Configuration

11. Max. Take-off Weights

Note: Recommended Tyre inflation pressure for main wheels against different Take-off weights to be indicated below:

12. Landing

(a) Max. Landing Weights :

(b) Landing with Asymmetric Stores :

(c) Use of Brake Parachute :

13. Single Engine Performance: (Where more than one engine is used)

(a) Minimum Safety Speed :

(b) Drift Ceiling :

14. One Engine Failure During Take-off : (Where more than one engine is used) (Min Safety Speed)

15. Engine Relights (Relight envelop speed / mach no. vs altitude)

Maximum speeds for engine relighting in flight, as established by flight tests, are :

Successful Relights are more probable at lower speeds than specified above in each of the altitudes.

16. Pressure Error Correction

17. Use of AVTAG (JP-4) Fuel

18. Gun Firing

19. Ejection Seat

(a) Ejection Limits :

(b) Thigh Length and Sitting Height :

20. Engine Limitations

This FCC is issued for Developmental Flight Trials only and it does not constitute any authority to fly unless accompanied by a current Certificate for safety for flight (F-1090) issued by DGAQA.

Head of Design
Contractor's Firm

CEMILAC / RCMA

Version : 2.0

Date: August 2023