SUPPLEMENT N048
TO THE AIRPLANE FLIGHT MANUAL
DA 42 NG & DA 42 M-NG

OPERATION IN THE UKRAINE

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Signature :

Stamp : European Aviation Safety Agency General Aviation

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This airplane must be operated in compliance with the information and limitations contained in this supplement and the basic Airplane Flight Manual.

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0.1 RECORD OF REVISIONS

Rev. No.	Reason	Chap-ter	Page(s)	Date of Revision	Approval Note	Date of Approval	Date Inserted	Signature

0.2 LIST OF EFFECTIVE PAGES

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1. GENERAL

No change.

2. OPERATING LIMITATIONS

2.11 OPERATING ALTITUDE

The maximum operating altitude is 4200 m (13779 ft) Pressure Altitude.

NOTE

For flights at altitudes above 3600 m (11811 ft) the crew must use oxygen equipment. Flights between 3000 m (9842 ft) and 3600 m (11811 ft) altitude without oxygen equipment for the crew are limited to a maximum of 30 minutes.

For airplane operation above 3000 m (9842 ft) for more than 30 minutes, oxygen supply must be provided for at least one passenger.

2.16 OTHER LIMITATIONS

2.16.11 TEMPERATURE

- The airplane may only be operated when its temperature prior to operation is not less than -20 °C (-4 °F) and the outside air temperature on ground is not higher than 45 °C (113 °F).
- With the airplane cold soaked and its temperature below -20 °C (-4 °F) the use of an external pre-heater for the engine and pilot compartment prior to operation is mandatory.

2.16.12 RUNWAY SURFACE

Take Off and landing operations must be conducted on dry or wet paved surfaces or dry grass surfaces with a maximum grass height of 10 centimeters.

2.16.13 AIRSPACE

Flights are only permitted along routes with continuous VHF coverage.

2.16.14 COCKPIT VOICE RECORDER

Operation without a cockpit voice recorder is not permitted if two pilots are required.

2.16.15 FLIGHTS OVER WATER

Flights over water are permitted within the limitations prescribed by operational regulations.

3. EMERGENCY PROCEDURES

3.1 INTRODUCTION

3.1.1 GENERAL

NOTE

If possible switch on the landing lights during emergency landings.

3.12 FAILURES IN THE CONTROLS SYSTEM

3.10.1 DISCONNECTED OR JAMMED CONTROLS

Disconnected Rudder

With a disconnected rudder adequate directional control can be achieved using the rudder trim and asymmetric engine power.

During approach use a glide path as shallow as possible and extend the pattern to achieve a long final.

During landing the airplane may turn initially in opposite direction of aileron use and the airplane has to be laterally balanced with the aileron as required when using asymmetric power. Avoid bank angles exceeding 30° during the pattern and 15° on final approach.

During crosswind landings it is necessary to lower the wing into the wind. Before correcting the crab for runway heading, consider the yaw effect when changing the bank angle and use rudder trim for corrections.

Jammed Rudder

With a jammed rudder directional control can be achieved with asymmetric power and the rudder trim control which will operate in the opposite sense.

During approach use a glide path as shallow as possible and extend the pattern to achieve a long final.

During landing the airplane has to be controlled with asymmetric power and rudder trim as required whereas the main directional control will be achieved with power and the effectiveness of trim is reduced.

During crosswind landings it is necessary to lower the wing into the wind. Before correcting the crab for runway heading consider the yaw effect when changing the bank angle and use asymmetric power for corrections.

Disconnected or Jammed Ailerons

Adequate lateral control can be achieved by using a combination of rudder and asymmetric engine power.

During approach use a glide path as shallow as possible and extend the pattern to achieve a long final.

During landing the airplane has to be controlled with asymmetric power and the use of rudder as required whereas the main directional control will be achieved with rudder and the bank angle shall be corrected mainly with power.

During crosswind landings it is necessary to lower the wing into the wind and before touch down add power on the lowered side to balance the bank angle and keep the runway direction with the rudder.

Disconnected Elevator

Adequate pitch control can be achieved by using the elevator trim and symmetric engine power. The flap setting has to be chosen in accordance to weight, balance and power and shall be established in the very beginning of the final approach.

During approach use a glide path as shallow as possible and extend the pattern to achieve a long final.

During landing expect the airplane to pitch down when reducing power. Correct with elevator trim prior touch down and reduce power slowly. Avoid aggressive power changes during the approach.

Jammed Elevator

Adequate pitch control can be achieved by using symmetric engine power and the elevator trim in opposite sense whereas the main pitch control will be achieved with power and the effectiveness of trim is reduced.

With jammed elevator the airplane must be landed in the flaps up position.

During approach use a glide path as shallow as possible and extend the pattern to achieve a long final.

During landing expect the airplane to pitch down when reducing power. Correct with elevator trim prior touch down and reduce power slowly. Avoid aggressive power changes during the approach.

4A. NORMAL OPERATING PROCEDURES

4A.6 CHECKLISTS FOR NORMAL OPERATING PROCEDURES

4A.6.7 TAKE OFF

NOTE

In strong crosswinds steering can be augmented by use of the toe brakes. It should be noted, however, that this method increases the take-off roll, and should not generally be used.

Upon take-off the application of aileron control into the wind to maintain wings level and rudder to maintain directional control may be required.

4A.6.11 APPROACH AND LANDING

NOTE

During landing in crosswind conditions, immediately prior to touchdown lower upwind wing and align the fuselage with the runway by use of rudder. During rollout, hold aileron control into the wind and maintain directional control with rudder and brakes.

4B. ABNORMAL OPERATING PROCEDURES

No change.

5. PERFORMANCE

5.3.10 LANDING DISTANCES

NOTE

In order to calculate the required operational landing distances for dry surfaces, increase the landing distance by:

- 67 % for basic airfields

- 43 % for diversion airfields

In order to calculate the required operational landing distances for wet surfaces, increase the landing distance by:

- 92 % for basic airfields

- 64% for diversion airfields

5.3.12 APPROVED NOISE DATA

APPROVED NOISE DATA DA 42 NG

NOTE

The certificated noise level for the Diamond DA 42 NG complies with noise levels limits specified in ICAO Annex 16, Volume 1, Chapter 10.

MTOW [kg]	Propeller	Additional Modifications	Take Off dB(A)	
			Actual [dB(A)]	Max. allowable [dB(A)]
1900	MTV-6-R-C-F/CF 187-129	Silencer: Diamond Aircraft D64-7806-10-00	78.0	88.0

APPROVED NOISE DATA DA 42 M-NG

NOTE

The certificated noise levels for the Diamond DA 42 M-NG comply with noise levels limits specified in ICAO Annex 16, Volume 1, Chapter 10.

MTOW [kg]	Propeller	Additional Modifications	Take Off dB(A)	
			Actual [dB(A)]	Max. allowable [dB(A)]
1900	MTV-6-R-C-F/CF 187-129	Silencer: Diamond Aircraft D64-7806-10-00	78.0	88.0
1900	MTV-6-R-C-F/CF 187-129	Silencer: Diamond Aircraft D64-7806-10-00, OÄM 42-168 Belly Pod	78.9	88.0
1900	MTV-6-R-C-F/CF 187-129	Silencer: Diamond Aircraft D64-7806-10-00, OÄM 42-169 Universal Nose	79.0	88.0

6. MASS AND BALANCE

No change.

7. DESCRIPTION OF THE AIRPLANE AND ITS SYSTEMS

No change.

8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.