

**SUPPLEMENT N017
TO THE AIRPLANE FLIGHT MANUAL
DA 42 NG**

IAC AR CERTIFIED AIRPLANES

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**I This Supplement is approved by EASA on behalf of IAC AR under EASA CSV 0060042359
I and 0060043326.**

This airplane must be operated in compliance with the information and limitations contained herein.

Prior to operation the pilot must take notice of all information contained in this supplement to the Airplane Flight Manual.

**DIAMOND AIRCRAFT INDUSTRIES GMBH
N.A. OTTO-STR. 5
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AUSTRIA**

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0.1 RECORD OF REVISIONS

Rev. No.	Reason	Chapter	Page(s)	Date of Revision	Approval Note	Date of Approval	Date Inserted	Signature
1	MÄM 42-678, OÄM 42-260 incorporated	0, 4A, 5	9-N017-1, 9-N017-3, 9-N017-4, 9-N017-13, 9-N017-15	22-Oct-2015	Rev.1 to AFM Supplement N017 to AFM Doc.No. 7.01.16-E is approved by EASA on behalf of IAC AR under EASA CSV 0060042359 and 0060043326	05-Jan-2016		

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IAC AR Certified
Airplanes



DA 42 NG AFM
Supplement N017

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1. GENERAL

No change.

2. OPERATING LIMITATIONS

2.11 OPERATING 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.

The flight level under IFR must not exceed 4200 m (13779 ft).

The maximum permitted airfield elevation is less than 3050 m (10000 ft) Pressure Altitude.

2.12 FLIGHT CREW

Piloting of the airplane is only permitted from the left hand front seat.

If the right hand control stick is not removed, the right seat must not be occupied by a passenger.

2.16 OTHER LIMITATIONS

2.16.11 AIRSPACE

Flights in Russian airspace are permitted only along the routes with continuous ATC monitoring using RBS mode with VHF covering zones.

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2.16.12 OUTSIDE GROUND AIR TEMPERATURE

The airplane may only be operated if the Outside Ground Air Temperature is in between -35 °C (-31°F) and +45 °C (+113 °F) and the airplane has not been stored at a temperature below -20 °C (-4 °F) for more than 5 hours.

2.16.13 RUNWAY SURFACE

Take Off and landing operations must be conducted on paved dry or wet surfaces.

2.16.14 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.

NOTE

After an emergency landing remove the VHF radio from the back of the pilots seat and operate it as prescribed in the enclosed instruction.

3.13 FAILURES IN THE CONTROLS SYSTEM

3.13.1 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

I 4A.6.6 BEFORE TAKE-OFF

I If OÄM 42-251 is installed:

I CAUTION

I Take-off is only permitted when the Fuel Temperature
I Indication is in the green range.

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 & 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.

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4B. ABNORMAL OPERATING PROCEDURES

No change.

5. PERFORMANCE

5.3.12 APPROVED NOISE DATA

The certificated noise levels for the Diamond DA 42 NG comply with noise levels limits specified in Aviation Regulations, Part 36, Section F.

Noise level:

MTOW [kg]	Propeller	Add. Modification	Actual [dB(A)]	Max. allowable [dB(A)]
1900	MTV-6-R-C-F/CF 190-69	-	73.8	88.0
1999	MTV-6-R-C-F/CF 190-69	MÄM 42-678	75.0	88.0
2001	MTV-6-R-C-F/CF 190-69	MÄM 42-678 + OÄM 42-260	75.0	88.0

NOTE

The above noise level is also in compliance with ICAO Annex 16, Volume 1, Chapter 10 noise limits.

No determination has been made by the IAC Aviation Register that the noise levels of this airplane are or should be acceptable or unacceptable for operation at, into, or out of any airport.

6. MASS AND BALANCE

No change.

7. DESCRIPTION OF THE AIRPLANE AND ITS SYSTEMS

No change.

8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.