

FLIGHT MANUAL OF THE Z 1 4 2 C AIRCRAFT

Production No./Series

Registration Mark

Manufacturer MORAVAN - AEROPLANES Inc.
765 81 Otrokovice
CZECH REPUBLIC

Category AEROBATIC (A)
UTILITY (U)
NORMAL (N)

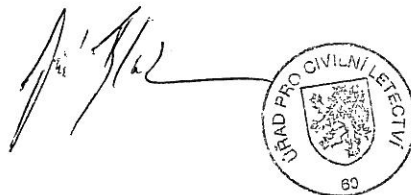
Certification Basis FAR PART 23 with incorporated Amendments as to No.
23-20 inclusive

THIS FLIGHT MANUAL HAS BEEN APPROVED BY THE CIVIL AVIATION AUTHORITY – Prague
on: 21 October 1991 Doc. No. LG-Z 142-Z 213

THIS DOCUMENT MUST BE CARRIED IN THE AIRPLANE AT ALL TIMES. COMPLIANCE WITH
SECTION 2 LIMITATIONS IS MANDATORY.

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Revision No. 9: 24 November 2006



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| 2-3 | 1. 7.1994 | 4-5 | 21.10.1991 | 6-5 | 21.10.1991 |
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1. G E N E R A L

1.1. I N T R O D U C T I O N

Validity:

This FLIGHT MANUAL applies only to the aircraft identified by production number on the page 0 - 1.

CAUTION:

THE PILOT OF THE Z 142C AIRCRAFT MUST BECOME FAMILIAR WITH THE CONTENTS OF THIS FLIGHT MANUAL BEFORE THE FLIGHT.

1.2. C H A N G E S

1.2.1 All changes or supplements of this FLIGHT MANUAL are performed as follows:

/1/ The Aircraft Manufacturer will send the Mandatory Bulletin including changes or new (revised) pages of the FLIGHT MANUAL to the holder of the FLIGHT MANUAL.

/2/ The holder of the FLIGHT MANUAL is obliged:

- a) To carry out the change or replace original pages by new ones (marked with the new date of revision) according to Bulletin instructions.
- b) To insert a new List of effective pages.
- c) To record the performed change into the LOG OF CHANGES - item 1.2.2.

NOTE

The changed or supplemented parts of the text are marked by vertical black line along the outside of the page.

1.2.2. Log of changes

| Change No. | No. of Bulletin ordering the change | Pages affected | Date of Revision | Performed on/ signature |
|------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------|-------------------------|
| 1 | Z 142C/2 | 0-5, 2-5, 2-7, 2-8, 4-8, 4-9, 4-10, 4-11, 4-13, 4-15, 4-16, 4-18 | 2.2.1993 | |
| 2 | Z 142C/6a | 0-5, 2-26, 3-1, 3-10 | 28.4.1994 | |
| 3 | Z 142C/5a | 0-5, 1-4, 1-10, 1-13, 1-14, 1-15, 2-1, 2-3, 2-3a, 2-3b, 2-4, 2-5, 2-5a, 2-5b, 2-6, 2-9, 2-17, 5-5, 6-1, 6-6, 6-21 | 1.7.1994 | |
| 4 | Z 142C/8a | 0-5, 1-4, 1-8, 2-20, 2-21, 2-22, 2-23, 2-24, 2-25, 2-26 | 1.11.1994 | |
| 5 | Suppl. No. 1 Z 142C/8a | 0-5, 1-4, 1-8 | 24.3.1995 | |
| 6 | Z 142C/10a | 0-5, 1-4, 2-11 | 31.8.1995 | |
| 7 | Z 142C/24a | 0-5, 1-4, 1-8, 2-16, 2-17, 2-18, 2-19, 2-20, 2-21, 2-22, 2-23, 2-24, 2-25, 2-26 | 31.1.2002 | |
| 8 | Z 142C/18a Rev. 1 | 0-1, 0-5, 1-4, 2-9a, 2-9b | 15.4.2003 | |
| 9 | Z 142 C/30a | 0-1, 0-5, 1-4, 2-10, 2-11 | 24.11.2006 | |
| | | | | |

Notes:

/1/ The holder of the FLIGHT MANUAL is obliged to do this record in accordance with 1.2.2. - Changes.

/2/ All changes and supplements in this FLIGHT MANUAL issued before the date of issue, stated on page 0-1, are carried out by the manufacturer.

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2.16. AEROBATIC MANEUVERS

2.16.1. Category Aerobatic (A) and Utility (U)

The following is a list of the allowed maneuvers for the Z 142 C aircraft in aerobatic category:

For the utility category only maneuvers 1, 2, 4 and 10 is permitted.

| No. | Name | Recommended Entry Speed knots IAS |
|-----|-----------------------------------------------------------------------------------------------------------------|-----------------------------------|
| 1. | Steep turn - category A angle of bank without limitations - category U angle of bank more than 60°, max. 90° | min. 97 |
| 2. | Chandelle | min. 120 |
| 3. | Looping | min. 130 |
| 4. | Lazy eight | min. 97 |
| 5. | Half loop and and half roll (Immelmann turn) | min. 135 |
| 6. | Half roll and half loop | max. 80 |
| 7. | Stalled turn | min. 97 |
| 8. | Slow roll | min. 97 |
| 9. | Whip stall (tail down stall) | min. 97 |
| 10. | Spin | 59 |
| 11. | Inverted flight | min. 108 |
| 12. | Inverted turn | min. 108 |
| 13. | Inverted loop from normal flight | max. 59 |
| 14. | Inverted loop from inverted flight | min. 140 |
| 15. | Inverted spin | 75 |

CAUTION:

ABOVE MENTIONED AEROBATIC MANEUVERS MAY BE PERFORMED BOTH IN SOLO OR TWO OCCUPANTS OPERATION IN ANY DESIRED SEQUENCE, COMBINATIONS AND ATTITUDES COMPLYING WITH FOLLOWING LIMITATIONS:

- (1) WEIGHTS AND CENTER OF GRAVITY POSITION - ITEM 2.3. - 2.5.
- (2) POWER PLANT LIMITATIONS - ITEM 2.6. - 2.7.
- (3) LIMITATIONS OFF : AIRSPEED, LOAD FACTOR, MANEUVERING ENVELOPE - ITEM 2.13 - 2.15.
- (4) INVERTED FLIGHT - MAX. 1 MIN. 30 SEC FOR AEROBATIC CATEGORY. FOR THE UTILITY CATEGORY INVERTED FLIGHTS AND INTENTIONAL MANEUVERES WITH NEGATIVE LOAD FACTORS ARE PROHIBITED.
- (5) SPIN
 - (A) PERMISSIBLE NUMBER OF TURNS: MAX. 6.
 - (B) INTENTIONAL SPINS WITH WING FLAPS EXTENDED ARE PROHIBITED.
 - (C) INTENTIONAL POWER ON SPINS ARE PROHIBITED.
- (6) FLICK ROLLS ARE PROHIBITED.
- (7) AEROBATIC MANEUVERS ARE PROHIBITED:
 - (A) WITH FUEL IN AUXILIARY TANKS
 - (B) WITH LUGGAGE IN LUGGAGE COMPARTMENT.
- (8) FUEL VALVE POSITION - LEFT TANK

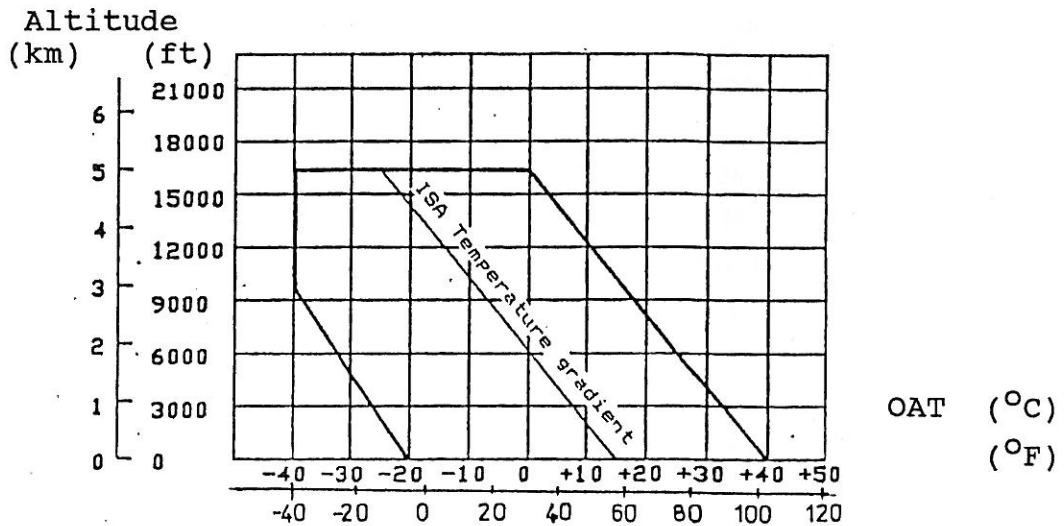
2.16.2. Category normal (N)

- (a) In category NORMAL (N) (weight of more than 1020 kg (2250 lbs) or fuel in auxiliary tanks) all aerobatic maneuvers including intentional spins and stalls are PROHIBITED.
- (b) In category NORMAL (N) are permitted following flight maneuvers:

| No. | Name | Recommended Entry Speed knots IAS |
|-----|-------------------------------------|--------------------------------------|
| 1. | Steep turn (angle of bank max. 60°) | min. 103 |
| 2. | Chandelle | min. 120 |
| 3. | Slip | 75 |

2.17. OUTSIDE AIR TEMPERATURE

The permissible outside air temperature range is determined in the following diagram by the limited area:



2.18. FLIGHT IN ICING CONDITONS

Flights in icing conditions are PROHIBITED.

2.19. MINIMUM CREW, MAXIMUM OCCUPANCY

Minimum aircraft crew is one pilot.
Maximum passenger seating - one (right seat).

2.20. MAIN SPARE FLANGE MINIMUM NITROGEN PRESSURE

Minimum admissible nitrogen pressure in the main spar flange is 150 kPa (22 P.S.I.)

CAUTION:

- (1) IN CASE OF NITROGEN PRESSURE DROP BELOW THE SPECIFIED MINIMUM LIMIT THE AIRCRAFT MUST BE PUT OUT OF OPERATION UNTILL THE FAULT IS DISCOVERED AND REMOVED.
- (2) IN CASE OF NITROGEN PRESSURE DROP BELOW THE SPECIFIED MINIMUM LIMIT DURING FLIGHT THE FLIGHT MUST BE INTERRUPTED BY PRECAUTIONARY LANDING ON THE NEAREST AIRPORT. DURING THE REST OF FLIGHT THERE IS NECESSARY TO AVOID INTENTIONAL OVERLOADS OF THE PRIMARY STRUCTURE.