

Rules of Air Handbook

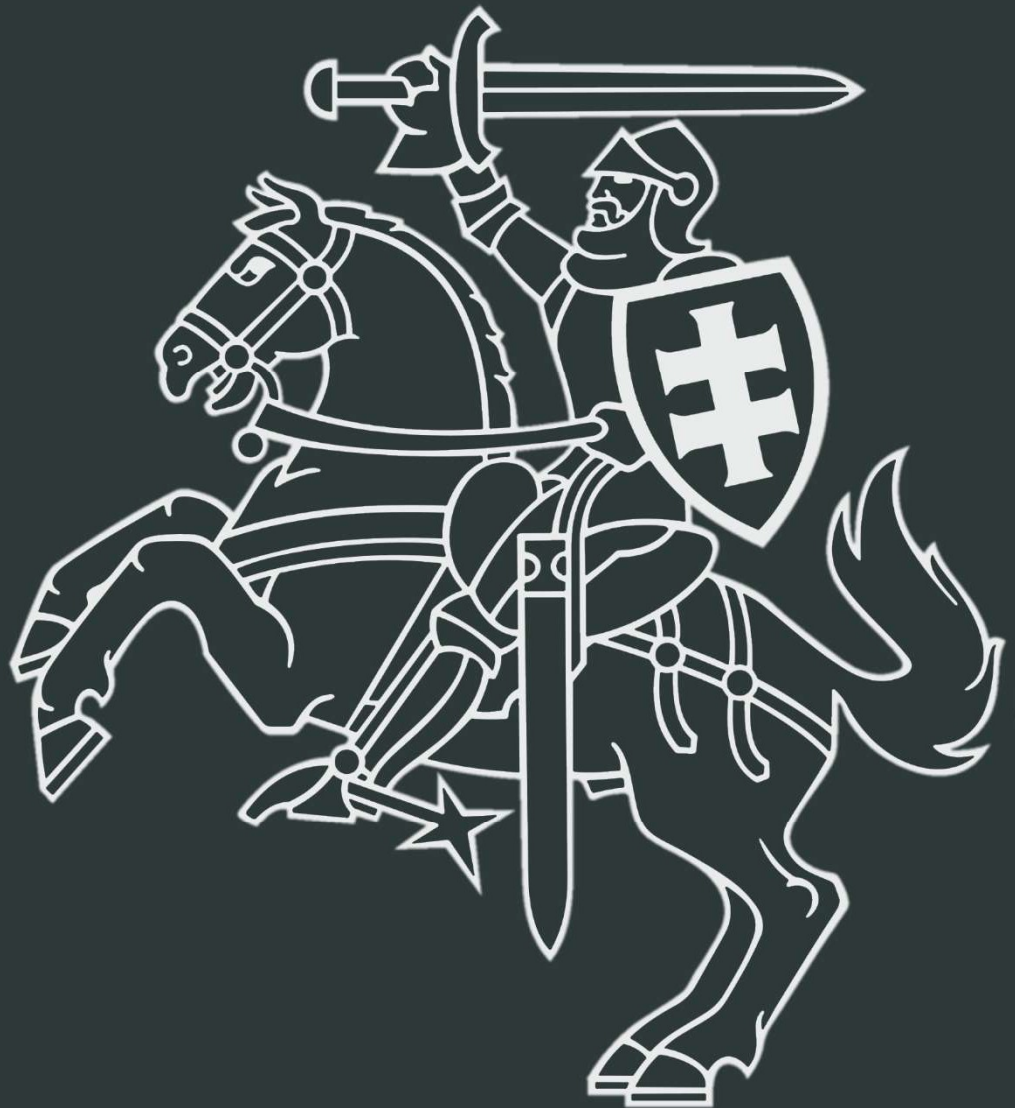


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Section A – General

This vACC Lithuania Rules of Air Handbook (hereafter Handbook) provides short excerpt from different AIP and other documents describing how airspace works. Any additional required laws, rules and document's parts will be placed in text where it is applicable, and needed references will be added where is not applicable.

Within the Handbook the following verbs are used and shall be clarified:

- Shall – determines the mandatory item, action or statement;
- Shall not – determines a prohibition;
- Should – determines the item, action or statement that are considered to be a good practice;
- May – determines the item, action or statement that are recommended or optional.

Within the Handbook the following nouns are used:

- Pilot – a member of VATSIM network who is performing function of flying the aircraft, this may include a pilot monitoring or any other crew member, in case of shared cockpit flight, who may perform any kind of duties related to aircraft operation;
- ATC – a member of VATSIM network with corresponding rating and approval, who provides air traffic control service at designated position and/or zone;
- Tower ATC – ATC occupying a non-radar Tower position;
- Radar ATC – ATC occupying a radar Approach, Control or Tower position.

Any other markups and text styles will be used freely to point your attention for some situations or special cases.

In case you have any questions feel free to contact vACC Instructors in Discord.

Section B – Phraseology Basics

1. Transmission of Letters

In Lithuanian airspace English language is used for phraseology based on ICAO Doc 9432.

For transmitting letters ICAO Radiotelephony alphabet is used. Words coding is stated in table below.

Letter	Name	Pronunciation	Letter	Name	Pronunciation
A	Alpha	<u>AL</u> FAH	N	November	NO <u>VEM</u> BER
B	Bravo	BRAH <u>VOH</u>	O	Oscar	<u>OSS</u> CAH
C	Charlie	<u>CHAR</u> LEE	P	Papa	PAH <u>PAH</u>
D	Delta	<u>DELL</u> TAH	Q	Quebec	KEH <u>BECK</u>
E	Echo	<u>ECK</u> OH	R	Romeo	<u>ROW</u> ME OH
F	Foxtrot	<u>FOKS</u> TROT	S	Sierra	SEE <u>AIR</u> RAH
G	Golf	GOLF	T	Tango	<u>TANG</u> GO
H	Hotel	HO <u>TELL</u>	U	Uniform	<u>YOU</u> NEE FORM
I	India	<u>IN</u> DEE AH	V	Victor	<u>VIK</u> TAH

J	Juliett	<u>JEW LEE ETT</u>	W	Whiskey	<u>WISS KEY</u>
K	Kilo	<u>KEY LOH</u>	X	X-ray	<u>ECKS RAY</u>
L	Lima	<u>LEE MAH</u>	Y	Yankee	<u>YANG KEY</u>
M	Mike	<u>MIKE</u>	Z	Zulu	<u>ZOO LOO</u>

2. Transmission of Numbers

For transmitting numbers this coding stated in shall be used.

Number	English pronunciation	Number	English pronunciation
0	ZE-RO	7	SEV-EN
1	WUN	8	AIT
2	TOO	9	NIN-ER
3	TREE	.	DEY-SEE-MAL
4	FOW-ER	100	HUN-DRED
5	FIFE	1000	TOU-SAND
6	SIX		

LIMA YANKEE BRAVO FOXTROT TANGO, TAXI TO HOLDING POINT RUNWAY ONE EIGHT VIA TAXIWAYS CHARLIE ONE AND BRAVO

When transmitting numbers, each digit is pronounced separately, except:

- All numbers used in altitude, height, visibility, runway visual range, that contain hundreds or thousands, each digit is expressed separately, denoting the number of hundreds or thousands, followed by the word "HUNDRED" or "THOUSAND" respectively.

ALTITUDE TWO THOUSAND, RUNWAY VISUAL RANGE FIVE HUNDRED METERS

- All combinations of thousands and hundreds, each digit is numbered, indicating the number of thousands, followed by the word "THOUSAND" and the number of hundreds, followed by the word "HUNDRED".

ALTITUDE ONE THOUSAND SIX HUNDRED FEET

- The numbers of "hundred-based" flight levels FL100, FL200, FL300 etc. may be transmitted as hundreds.

FLIGHT LEVEL TWO HUNDRED

In any case digits of number may be pronounced separately, if it's needed due to some reasons (such as unreliable radio communication, instructions repeating and so on).

When transmitting time, only minutes of this time shall be specified. If this time contains an hour different from current hour, ATC shall specify hour and minutes.

TIME IS ZERO EIGHT TWO THREE

3. Transmission of Callsigns

All callsigns are divided in the three groups:

- Callsigns corresponding to the registration numbers of the aircraft (D-HECE, LY-BFT);
- Names of airlines followed with aircraft's registration numbers (CESSNA HECE, EMIRATES RPSI);
- Names of airlines followed with number of flights (SAS156, KLM987)

Callsigns should be reduced in this way corresponding to above items:

- To the first sign of registration mark and at least the last two **characters-symbols** (DCE, LFT);
- To the airliner's name followed by at least the last two **characters-symbols** (CESSNA CE, EMIRATES SI);
- Name of airline followed by the flight number callsigns shall not be shortened.

Callsign should be shortened only on the ATC's own initiative. Pilot shall not use shortened callsign unless ATC have used the shortened callsign first.

Section C – Airspace

1. Transition Altitude and Levels

Transition Altitude (TA) in Lithuania is constant and is 5000 feet. Flights that are performed below this altitude shall use QNH-based levels to fly while communicating, **this level/these levels** shall be called "altitude".

Transition Level (TL) in Lithuania is non-constant and is determined by QNH value at the airfield. Flights that are performed above this level shall use QNE-based levels to fly and while communicating a term "Flight level (FL)" shall be used.

Transition Level equals:

- 942-958 hPa – FL 80.
- 959-976 hPa – FL 75.
- 977-994 hPa – FL 70.
- 995-1012 hPa – FL 65.
- 1013-1030 hPa – FL 60.
- 1031-1050 hPa – FL 55.

Horizontal flights between TA and TL are prohibited.

2. Airspace Classification

In Lithuania half-circle system vertical separation is used. This means that for westbound flights even flight levels are used. For eastbound flights – odd flight levels are used.

In Lithuania airspace classes C, D and G are used.

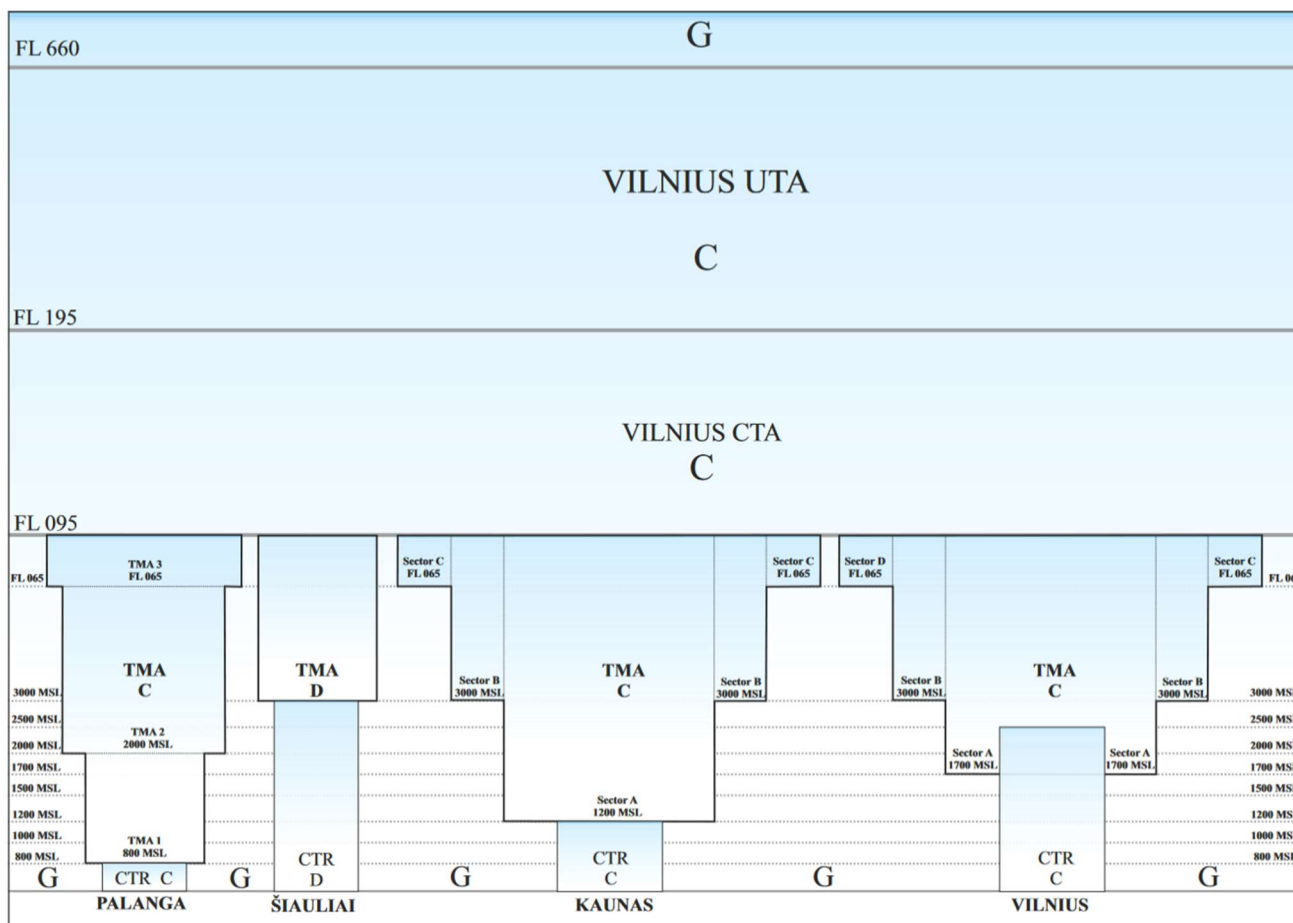
Class C and class D airspaces are controlled. Class G airspace is uncontrolled.

IFR flights in the class G airspace are prohibited.

Over Lithuania the following airspace classes limitations are used:

- Class C – from FLO95 (exclusively) to FL 660 (inclusively).
- Class D – only Siauliai CTR, Siauliai TMA.
- Class G – from ground or sea level to altitude FLO95 (inclusively).

Other limits are defined by the controlled (CTR, TMA, CTA) and flight informed (AFIZ, ATZ) zones.



In airspace class C ATC shall separate:

- IFR traffic from IFR traffic.
- IFR traffic from VFR traffic.
- VFR traffic from IFR traffic.

In airspace class C ATC shall inform VFR traffic about VFR traffic. Traffic avoidance advice shall be given on request only.

In airspace class D ATC shall separate IFR traffic from IFR traffic.

In airspace class D ATC shall inform:

- IFR traffic about VFR traffic.
- VFR traffic about IFR traffic.
- VFR traffic about VFR traffic.

For the above-mentioned items, traffic avoidance advice must-shall be given on request only.

In airspace class G separation is not used.

In airspace class G flight information service is provided for all traffic. IFR and VFR traffic are informed about IFR and VFR Traffic. Traffic avoidance advice shall not be given.

Complete information about airspace classes, limitations and use is provided in AIP ENR 1.2 - ENR 1.4.

In case the pilot request to change flight rules from VFR to IFR, ATC shall:

- If the pilot has no ATC clearance, issue such ATC clearance.
- Give proper squawk.
- Give instructions to climb/descend to specific altitude or flight level (shall be coordinated with Radar ATC if applicable). Note, ~~that~~ this altitude shall be above MSA/MRVA.
- Give instructions to change frequency to proper ATC unit, if applicable.

In case the pilot requests to change flight rules from IFR to VFR, ATC shall give acknowledgement:

LYBFT, CANCELLING MY IFR FLIGHT

LYBFT, IFR FLIGHT CANCELLED AT 1240 Z

Normally, ATC should not give other instructions, but ATC may give instructions about maneuvering in the controlled zone, if necessary.

ATC shall not invite the pilot to change from IFR to VFR flight.

The vertical distance between 2 opposite directed FLs is 1000 feet from TL, to FL290.

Vertical distance between 2 opposite directed FLs is 1000 feet from FL290, to FL410 since RVSM is used in Lithuania.

The vertical distance between 2 opposite directed FLs is 2000 feet from FL410, to FL660.

TRACK ¹											
From 000 degrees to 179 degrees						From 180 degrees to 359 degrees					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Level			Level			Level			Level		
FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres
010	1 000	300	-	-	-	020	2 000	600			
030	3 000	900	035	3 500	1 050	040	4 000	1 200	045	4 500	1 350
050	5 000	1 500	055	5 500	1 700	060	6 000	1 850	065	6 500	2 000
070	7 000	2 150	075	7 500	2 300	080	8 000	2 450	085	8 500	2 600
090	9 000	2 750	095	9 500	2 900	100	10 000	3 050	105	10 500	3 200
110	11 000	3 350	115	11 500	3 500	120	12 000	3 650	125	12 500	3 800
130	13 000	3 950	135	13 500	4 100	140	14 000	4 250	145	14 500	4 400
150	15 000	4 550	155	15 500	4 700	160	16 000	4 900	165	16 500	5 050
170	17 000	5 200	175	17 500	5 350	180	18 000	5 500	185	18 500	5 650
190	19 000	5 800	195	19 500	5 950	200	20 000	6 100	205	20 500	6 250
210	21 000	6 400	215	21 500	6 550	220	22 000	6 700	225	22 500	6 850
230	23 000	7 000	235	23 500	7 150	240	24 000	7 300	245	24 500	7 450
250	25 000	7 600	255	25 500	7 750	260	26 000	7 900	265	26 500	8 100
270	27 000	8 250	275	27 500	8 400	280	28 000	8 550	285	28 500	8 700
290	29 000	8 850				300	30 000	9 150			
310	31 000	9 450				320	32 000	9 750			
330	33 000	10 050				340	34 000	10 350			
350	35 000	10 650				360	36 000	10 950			
370	37 000	11 300				380	38 000	11 600			
390	39 000	11 900				400	40 000	12 200			
410	41 000	12 500				430	43 000	13 100			
450	45 000	13 700				470	47 000	14 350			
490	49 000	14 950				510	51 000	15 550			
etc.	etc.	etc.				etc.	etc.	etc.			

For IFR and VFR flights ATC shall use squawks assigned automatically by Euroscope.

Squawks 7500 (hi-jack), 7600 (radio communication failure) and 7700 (emergency) are reserved.

Squawk code 7500 is prohibited to use in VATSIM and result in kick/ban from VATSIM servers, ATC shall never assign this squawk to traffic.

More information about airspace classification and flight rules is specified in AIP ENR 1.2, ENR 1.3, ENR 1.4, and ENR 1.7.

3. Separation

For all aircraft under control that need to be separated from each other, radar separation minimums are applied.

3.1. Vertical Separation

Vertical separation minimums are:

- From GND to FL 290 – 1000 feet.
- From FL 290 to FL 410 – 1000 feet (RVSM Zone).
- From FL 410 to FL 660 – 2000 feet.

3.2. Lateral Separation

Lateral separation minimums are:

- In CTA/UTA – 5 NM.
- In TMA/CTR – 3 NM.

For all aircraft in the approach and departure phases of flight separation connected with wake turbulence shall be applied. These rules are stated in Item 3.3.

3.3. Wake Turbulence Separation

ATC shall not use separation minimums connected with wake turbulence for:

- VFR traffic.
- IFR traffic executing visual approach following other arriving IFR traffic if traffic confirmed visual contact with aircraft ahead and obtained ATC instruction to maintain own separation.

In cases above, if the distance between aircraft is less than the appropriate wake turbulence minimum, the air traffic controller should issue a caution of possible wake turbulence:

LYBFT, CAUTION WAKE TURBULENCE FROM ARRIVING BOEING 747

If aircraft use the same runway, or parallel runways, that are located within 760 m (2500 feet) or less from each other, or if aircraft is flying directly or crossing behind other aircraft at the same altitude or less than 300 m (1000 feet) below, in the approach and departure phases of flight the following lateral separation minimums shall be used:

- HEAVY follows HEAVY – 4 NM.
- MEDIUM follows HEAVY – 5 NM.
- LIGHT follows HEAVY – 6 NM.
- LIGHT follows MEDIUM – 5 NM.

In any other weight-categories cases (e.g., LIGHT flying behind LIGHT, MEDIUM behind MEDIUM etc.) the lateral separation minimum is equal to horizontal separation minimum in corresponding controlled Zone (stated in the Item 3.2.).

In the approach and departure phases of flight the following lateral separation minimums shall be used for traffic that follows A380. If aircraft flying directly behind or crossing behind A380, at the same altitude or less than 300 m (1000 feet) below:

- HEAVY (excluding A380) follows A380 – 6 NM.
- MEDIUM follows A380 –7 NM.
- LIGHT follows A380 –8 NM.

In all the cases when wake turbulence separation is used but it is not specified in Item 3.3., minimum separation distance is not specified.

3.4. Reduction in separation minima

The separation minima may be reduced:

- If each aircraft is continuously visible to flight crews of the other aircraft concerned and the pilots thereof report that they can maintain their own separation.
- In the case of one aircraft following another. The flight crew of the succeeding aircraft reports that the other aircraft is in sight and separation can be maintained.
- Adequate separation can be provided by the ATC, when each aircraft is continuously visible to this controller by only using Tower View function within VATSIM client. Euroscope shall not be used as the only source of positions data for this case.

LYBFT, ADVISE YOU HAVE TRAFFIC ON 3 O'CLOCK 5 MILES IN SIGHT

AFFIRMATIVE, LYBFT

LYBFT, MAINTAIN OWN SEPARATION

It's a very useful practice to separate VFR traffic holding from IFR traffic on final.

In the case aircraft instructed to maintain own separation, ATC shall not be accounted for violation in separation minima.