PILOT'S HANDBOOK

Document Number – 01/2021

WARNING

The information in this document is intended for flight simulation only. Do not use for real world operations.

Document Control Details

Type	Policy
Revision	01/2021
Effective Date	01 September 2021
Prepared By	Janam Parikh – ACCIND1
Revised By	-NA-
Next Review	31 December 2021

Record of Revisions

Revision Number	Notes	Effective Date
01/2021	**Initial Issue**	**01-09-2021**

Table of Contents

Limitation of Liability

This document has been prepared for the use on the VATSIM network only. It should never be used for real world aviation operations. The authors cannot be held liable for any personal injury and/or death from the misuse of this document.

Scope

This document lays down the guidelines for pilots in the India vACC. It outlines the different details that pilots should be aware when flying on the VATSIM network within the Indian virtual airspace.

Introduction - Indian Airspace

Although our motto on VATSIM is to always simulate Real World ATC/Pilot Operations, there are few Airspace Regulations, Phraseologies and Operations that are not possible to simulate on VATSIM or have been modified for simplification.

The Indian airspace on VATSIM is classified into 5 Main Flight Information Regions (FIRs) -

Mumbai – VABF		**Chennai – VOMF**		**Delhi – VIDF**		**Kolkata – VECF**		**Guwahati - VEGF**	
Name	**Callsign**	**Name**	**Callsign**	**Name**	**Callsign**	**Name**	**Callsign**	**Name**	**Callsign**
Mumbai	VABB_CTR	Chennai	VOMM_CTR	Delhi	VIDP_CTR	Kolkata	VECC_CTR	Guwahati	VEGF_CTR
Ahmedabad	VAAH_CTR	Bengaluru	VOBL_CTR	Udhampur	VIUX_CTR	Varanasi	VEBN_CTR		
Nagpur	VANP_CTR	Shamshabad	VOHS_CTR	Delhi FIR	VIDF_CTR	Kolkata FIR	VECF_CTR		
Mumbai FIR	VABF_CTR	Mangalore	VOML_CTR			Kolkata Radio	VECX_CTR		
Mumbai Radio	VABX_CTR	Cochin	VOCI_CTR						
		Trivandrum	VOTV_CTR						
		Chennai FIR	VOMF_CTR						
		Chennai Radio	VOMX_CTR						

Types of ATC Positions

DEL: Clearance Delivery

GND: Surface Movement Controller

TWR: Aerodrome Controller / Procedural Tower

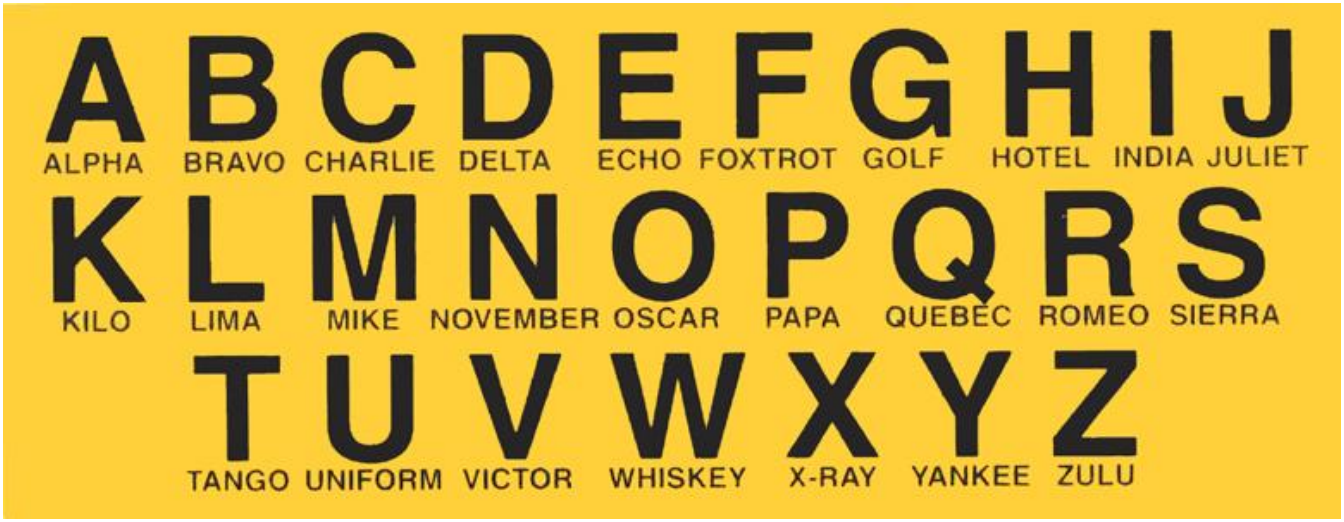
DEP: Departure Radar Controller

APP: Approach Radar Controller

CTR: Center / Control / ACC Controller

FSS: Flight Service Station

Phraseology Basics



Digits/Numbers		
Digit	**Spelt**	**Pronounced**
0	ZERO	ZE-RO
1	ONE	WUN
2	TWO	TOO
3	THREE	TREE
4	FOUR	**FOW**-ER
5	FIVE	FIFE
6	SIX	SIX
7	SEVEN	**SEV**-EN
8	EIGHT	AIT
9	NINE	**NIN**-ER

Image Credits: Redback Aviation

Transmission of Altitudes

NUMBER	TRANSMITTED AS	PRONOUNCED AS
FL 100	Flight Level One Zero Zero	Flight Level Wun Zero Zero
FL 180	Flight Level One Eight Zero	Flight Level Wun Ait Zero
HDG150	Heading One Five Zero	Heading One Fife Zero
18 KNOTS	One Eight Knots	One Ait Knots
118.1	One One Eight Decimal One	Wun Wun Ait Day See Mal Wun
6500	Six Five Zero Zero	Six Fife Zero Zero (Squawk)

Transmission of Time

When transmitting time within the same hour, only the minutes are normally required. However, the hour should be included if there is any possibility of confusion. Time checks shall be given to the nearest minute.

Co-ordinated Universal Time (UTC) is to be used at all times, unless specified. 2400 hours designates midnight, the end of the day and 0000 hours the beginning of the day.

NUMBER	TRANSMITTED AS	PRONOUNCED AS
0823	Two Three or Zero Eight Two Three	Too Tree or Zero Ait Too Tree

Transmission Quality

READABILITY SCALE	MEANING
1	Unreadable
2	Readable now and then
3	Readable but with difficulty
4	Readable
5	Perfectly readable

Standard Words and Phrases

WORD /PHRASE	MEANING
ACKNOWLEDGE	Let me know that you have received and understood this message.
AFFIRM	Yes.
APPROVED	Permission for proposed action granted.
BREAK	Indicates separation between messages.
BREAK BREAK	Indicates separation between messages transmitted to different aircraft in a busy environment.
CANCEL	Annul the previously transmitted clearance.
CHANGING TO	I intend to call .. (Unit) on .. (Frequency)
CHECK	Examine a System or procedure. (Not to be used in any other context. No answer is normally expected.)
CLEARED	Authorized to proceed under the conditions specified.
CLIMB	Climb and maintain.
HOLD SHORT	Stop before reaching the specified location.
HOW DO YOU READ	What is the readability of my transmission?
I SAY AGAIN	I repeat for clarity or emphasis.
MAINTAIN	Continue in accordance with the conditions specified or in the literal sense.
MONITOR	Listen out on (Frequency)
NEGATIVE	No or Permission not granted or That is not correct or Not Capable.
READBACK	Repeat all, or the specified part, of this message back to me exactly as received.
REPORT	Pass requested Information.
REQUEST	I should like to know. or I wish to obtain.
ROGER	I have received all your last transmission.
SPEAK SLOWER	Reduce your rate of speech.
STANDBY	Wait and I will call you. Note: No Onward Clearance to be assumed. STANDBY is not an approval or denial.
UNABLE	I cannot comply with your request, instruction or clearance. (Followed by a reason)
WILCO	I understand your message and will comply with it

Phraseology Examples – IFR and VFR

Instrument Flight Rules (IFR) Flight Plans Only

For RNAV Departure IFR Clearance

Transmitted By	Phraseology
Pilot	XXXX (Station Name), Air India 1, with Information A, XXX (people on board) souls on board through security, Stand XX (stand/gate number), request IFR Clearance to XXXX (destination)
ATC	Air India 1, cleared to XXXX (destination), via XXX (Standard Instrument Departure) Departure, XXX (transition name/fix) Transition, Departure Runway XX (active runway), Initial climb FLXX (initial altitude), Final Level XXX (final altitude), Squawk XXXX (designator)
Pilot	Air India 1 is cleared to XXXX, via XXX Departure, XXX Transition, Departure Runway XX, Initial climb FLXX, Final Level XXX, Squawk XXXX
ATC	Air India 1, Readback is Correct. Report ready for Startup and Pushback.
Pilot	WILCO, Air India 1

For Non RNAV Departure IFR Clearance

Transmitted By	Phraseology
Pilot	XXXX (Station Name), Air India 1, with Information A, XXX (people on board) souls on board through security, Stand/Gate XX (stand/gate number), request Non RNAV Departure to XXXX (destination)
ATC	Air India 1, cleared to XXXX, Departure RW XX, after departure maintain runway heading, climb initially FLXX, Passing FLXX, Turn RIGHT/LEFT heading XXX, Squawk XXXX.
Pilot	Air India 1 is cleared to XXXX, Departure RW XX, after departure maintain runway heading, climb initially FLXX, Passing FLXX, Turn RIGHT/LEFT heading XXX, Squawk XXXX.
ATC	Air India 1, Readback is Correct. Report ready for Startup and Pushback.
Pilot	WILCO, Air India 1

Pushback Clearance

Transmitted By	Phraseology
Pilot	XXXX (Station Name), Air India 1, at Stand/Gate XX, Ready for Pushback and Startup
ATC	Air India 1, Pushback and Startup is approved, Facing (direction), Report ready for Taxi
Pilot	Pushback and Startup approved, facing (direction), Will report ready for Taxi, Air India 1

Taxi Clearance

Transmitted By	Phraseology
Pilot	XXXX (Station Name), Air India 1, Request Taxi
ATC	Air India 1, Taxi to holding point XX, Runway XX, via taxiway X X X (taxi route), QNH XXXX
Pilot	Taxi to holding point XX, Runway XX, via taxiway X X X (taxi route), QNH XXXX, Air India 1

When approaching the Holding point, ATC **may** ask you to "monitor" the XXXX frequency. Please remember, if a controller is asking you to "monitor" a frequency, the pilot isn't supposed to contact the XXXX frequency. Instead, they should just tune and listen to the frequency while waiting for the XXXX controller to contact them first. Only when the ATC asks you to "contact" XXXX frequency, the pilot should contact the controller on the frequency.

Line up and Takeoff Clearance

Transmitted By	Phraseology
Pilot	XXXX (Station Name), Air India 1, Holding short XX, Ready for Departure
ATC	Air India 1, Line up and wait, Runway XX
Pilot	Line up and wait, Runway XX, Air India 1
ATC	Air India 1, Winds XXX degrees XX knots, Runway XX, Cleared for takeoff
Pilot	Cleared for takeoff, Runway XX, Air India 1

Climb/Enroute Phase

Transmitted By	Phraseology
Pilot	XXXX (Station Name), Air India 1, with you passing XXXX feet on XXX (SID) departure
ATC	Air India 1, Radar Identified, continue climb FL XX (and proceed direct WAYPOINT)
Pilot	Continue climb FL XX (and direct WAYPOINT), Air India 1
(During Handoff to Next Frequency)	
ATC	Air India 1, Contact XXXX (Station Name), Frequency XXX.XX, Jai Hind
Pilot	(Station Name), Frequency XXX.XX, Air India 1, Jai Hind
If a next controller is not online, pilots will be asked to monitor UNICOM on frequency 122.800	
ATC	Air India 1, Monitor UNICOM, Frequency 122.800, Jai Hind
Pilot	UNICOM 122.800, Air India 1, Jai Hind

Arrival Clearance

Transmitted By	Phraseology
ATC	Air India 1, Report ready to copy arrival clearance
Pilot	Ready to copy arrival clearance, Air India 1
(For airports with Standard Terminal Arrival (STAR) / Radar Vectors)	
ATC	Air India 1, Expect STAR (name and transition) / Radar Vectors, Approach Type (ILS/VOR/NDB/Visual) Runway XX, Report ready for descent
Pilot	Expect STAR (name and transition) / Radar Vectors, Approach Type (ILS/VOR/NDB/Visual) Runway XX, Will report ready for descent, Air India 1

Descend Phase

Transmitted By	Phraseology
Pilot	Air India 1, Ready for descent
ATC	Air India 1, Via STAR (name) / Radar Vector (Heading), Descend and maintain FL XX
Pilot	Via STAR (name) / Radar Vector (Heading), Descend and maintain FL XX, Air India 1
(For further descent with next controller)	
ATC	Air India 1, Contact XXXX (Station Name), Frequency XXX.XX, Jai Hind
Pilot	(Station Name), Frequency XXX.XX, Air India 1, Jai Hind

Approach Phase

Transmitted By	Phraseology
Pilot	Air India 1, Approaching FL XX, Request Further Descent
ATC	Air India 1, Continue descent FL XX / Altitude (feet)
Pilot	Continue descent FL XX / Altitude (feet), Air India 1
(Reaching Transition Level, ATC will advise arrival airport local QNH)	
ATC	Air India 1, Present position / heading, cleared for (approach) Runway XX (Depending on the approach type, ATC will ask the pilot to report fully stabilized for approach)
Pilot	Present position / heading, cleared for (approach) Runway XX, Will call you when established / stabilized, Air India 1

Landing Clearance / Phase

Transmitted By	Phraseology
Pilot	Air India 1, Fully established / stabilized Runway XX
(If the next frequency (TWR) is online)	
ATC	Air India 1, Continue approach Runway XX, monitor frequency on XXXX (Station Name)
Pilot	Continue approach, Air India 1
Pilot (after tuning to TWR frequency)	Air India 1, Fully established / stabilized Runway XX
ATC (TWR)	Air India 1, Winds XXX at XX, Runway XX, Cleared to land
Pilot	Winds copied, Runway XX, Cleared to land, Air India 1
(If the next frequency (TWR) is not online)	
ATC	Air India 1, Winds XXX at XX, Runway XX, Cleared to land
Pilot	Winds copied, Runway XX, Cleared to land, Air India 1

After Landing/Taxi to Stand

Transmitted By	Phraseology
Pilot	Air India 1, Vacated Runway XX via Taxiway X
(If the next frequency (GND) is online)	
ATC	Air India 1, Contact Ground on Frequency XXX.XX
Pilot	Ground, Frequency XXX.XX, Air India 1, Jai Hind
Pilot (after tuning to GND frequency)	Air India 1, Vacated Runway XX via Taxiway X
ATC (GND)	Air India 1, Taxi to stand XX, Report fully parked
Pilot	Taxi to stand XX, Will report fully parked, Air India 1
Pilot	Fully Parked on stand XX, Air India 1
ATC	Air India 1, Flight Plan Closed XX:XX (UTC time), monitor UNICOM 122.800, Jai Hind
Pilot	Monitor UNICOM 122.800, Air India 1, Jai Hind
(If the next frequency (GND) is not online)	
ATC	Air India 1, Taxi to stand XX, Report fully parked
Pilot	Taxi to stand XX, Will report fully parked, Air India 1
Pilot	Fully Parked on stand XX, Air India 1
ATC	Air India 1, Flight Plan Closed XX:XX (UTC time), monitor UNICOM 122.800, Jai Hind
Pilot	Monitor UNICOM 122.800, Air India 1, Jai Hind

Visual Flight Rules (VFR) Flight Plans Only

A VFR pilot usually calls Ground or Tower directly, assuming the pilot has done his preflight check and has started his engine(s).

Local Aerodrome Circuit

Transmitted By	Phraseology
Pilot	XXXX (Station Name), VTABC, with Information A, Stand XX (stand/gate number), request VFR Clearance for local circuit
ATC	VTABC, cleared for left/right hand circuit pattern, Runway XX, Climb and maintain XXXX feet, Squawk VFR
Pilot	Cleared for left/right hand circuit pattern, Runway XX, Climb and maintain XXXX feet, Squawk VFR, VTABC
ATC	VTABC, Readback is Correct. Report ready for Taxi.
Pilot	WILCO, VTABC
Pilot	XXXX (Station Name), VTABC requesting taxi
ATC	VTABC, Taxi to holding point XX, Runway XX, via taxiway X X X (taxi route), QNH XXXX
Pilot	Taxi to holding point XX, Runway XX, via taxiway X X X (taxi route), QNH XXXX, VTABC
Pilot	XXXX (Station Name), VTABC, Holding short XX, Ready for Departure
ATC	VTABC, Winds XXX degrees XX knots, Runway XX, Cleared for takeoff, Report Downwind
Pilot	Cleared for takeoff, Runway XX, Report Downwind, VTABC
Pilot	XXXX (Station Name), VTABC, Downwind Runway XX, Requesting Touch and Go/ Full Stop Landing (as intended by the VFR pilot)
ATC	VTABC, Roger, Report on Final Runway XX
Pilot	WILCO, VTABC
Pilot	XXXX (Station Name), VTABC, Final Runway XX
ATC	VTABC, Winds XXX at XX, Cleared for Touch and Go Runway XX, Report Downwind / Cleared to land Runway XX
Pilot	Winds copied, Cleared for Touch and Go Runway XX, Report Downwind / Cleared to land Runway XX, VTABC

Additional Information for VFR Flights

If the Real Time Weather is not suitable for VFR, the ATC will ask the pilot if he/she is simulating VMC (Visual Meteorological Conditions). If the pilot wishes to fly from an aerodrome which has non VMC to an Aerodrome which has VMC, he/she will request for SVFR (Special VFR) clearance. More Information about VFR Lessons can be found here: https://www.vatsim.net/pilot-resource-centre/vfr-specific-lessons/.

VFR Cross Country

Transmitted By	Phraseology
Pilot	XXXX (Station Name), VTABC, with Information A, Stand XX (stand/gate number), request VFR Clearance to XXXX (Destination)
ATC	VTABC, cleared VFR to XXXX (Destination), Runway XX, Climb initially XXXX feet/altitude, Squawk XXXX
Pilot	Cleared VFR to XXXX (Destination), Runway XX, Climb initially XXXX feet/altitude, Squawk XXXX, VTABC
ATC	VTABC, Readback is Correct. Report ready for Taxi.
Pilot	WILCO, VTABC
Pilot	XXXX (Station Name), VTABC requesting taxi
ATC	VTABC, Taxi to holding point XX, Runway XX, via taxiway X X X (taxi route), QNH XXXX
Pilot	Taxi to holding point XX, Runway XX, via taxiway X X X (taxi route), QNH XXXX, VTABC
Pilot	XXXX (Station Name), VTABC, Holding short XX, Ready for Departure
ATC	VTABC, Winds XXX degrees XX knots, Runway XX, cleared for takeoff, after departure, left/right traffic pattern/straight out
Pilot	Cleared for takeoff, Runway XX, after departure, left/right traffic pattern/straight out, VTABC
(During Handoff to Next Frequency)	
ATC	VTABC, Contact XXXX (Station Name), Frequency XXX.XX, Jai Hind
Pilot	(Station Name), Frequency XXX.XX, VTABC, Jai Hind
(Rest of the procedure remains the same as the local VFR aerodrome circuit explained above)	

Record of Revision and Amendments

Date	Revision No.	Revision Content	Effective Date	Approval
22-08-2021	01/2021	Creation of Document	01-09-2021	J. Parikh