## AD 2. AERODROMES

#### VAAH AD 2.1 AERODROME LOCATION INDICATOR AND NAME

VAAH - AHMEDABAD / INTL

#### VAAH AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	Aerodrome reference point coordinates and its site	230416N 0723735E 036 DEG/710M FM Physical Beginning Extremity of RWY 05		
2	Direction and distance of aerodrome reference point from the center of the city or town which the aerodrome serves	045 DEG/8KM from Ahmedabad Railway station		
3	Aerodrome elevation and reference temperature	189 FT / 42.0 DEG C		
4	Magnetic variation, date of information and annual change	0.25 DEG W (2010) /0.033 DEG E		
5	Name of aerodrome operator, address, telephone, telefax, e-mail address, AFS address, website (if available)			
		Telephone: +91-79-22869211, +91-9825024022, +91-79-22850333 (R)		
		Fax:	+91-79-22863561	
		AFS: VAAHYHYX		
		Email:	apdahm@aai.aero	
6	Types of traffic permitted (IFR/VFR)	IFR/VFR		
7	Remarks	NIL		

## VAAH AD 2.3 OPERATIONAL HOURS

1	Aerodrome Operator	MON-FRI 0400-1230 UTC (0930-1800 IST) SAT,SUN+ HOL : NIL
2	Custom and immigration	H24
3	Health and sanitation	H24 Doctor Available on call basis & First Aid Room Available with Apollo hospital in Terminal -1 and 2.
4	AIS briefing office	H24
5	ATS reporting office (ARO)	H24 (Combined with ARO)
6	MET Briefing office	H24
7	Air Traffic Service	H24
8	Fuelling	H24
9	Handling	PN With local Airlines Operators.
10	Security	H24
11	De-icing	NIL
12	Remarks	The approved hourly RWY traffic handling capacity: Maximum number of arrival and departures -20 Maximum number of arrivals only -15 Maximum number of departures only -12

## VAAH AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities Upto B747-Manual by arrangement with local Airlines	
2 Fuel and Oil types ATF, Jet A1, AVGAS 100LL		ATF, Jet A1, AVGAS 100LL
		NIL

3	Fuelling facilities and capacity	IOC:
	- access and compactly	Capacity: 2 Tanks of 200KL each and 2 tanks of 280 KL each (Total capacity 960KL) Vehicles:40KL (Three), 27KL (One), 16KL (Three), 11KL (One) Phone: +91-79-22869220
		Reliance Aviation Fuel System: Capacity: 2 tanks of 250KL each and 1 tank of 400KL (Total capacity 900KL Vehicles: 11KL (One), 16KL (Two) 27KL (Two). 35KL (One) (Total No. 6 Vehicles) Phone: +91-79-65250055
		BPCL: Capacity: 2 Tanks of 250KL each and 1 tank of 450KL Delivery and Vehicles: 1 vehicle of 45KL and 2 vehicles of 24KL capacity &2 vehicles of 15KL. Phone: +91-79-22865442
		HPCL: Storage Capacity: NIL, Delivery and Vehicles: 1 vehicle of 27KL and other vehicle of 16KL capacity. Phone: +91-9428331968
4	De-icing facilities	NIL
5	Hangar space for visiting aircraft	NIL
6	Repair facilities for visiting aircraft	Limited, prior arrangement with local airlines required
7	Remarks	NON SKD (Code C, D & E) aircraft should ensure availability of tow bar on board or with their ground handling agent

## VAAH AD 2.5 PASSENGER FACILITIES

1	Hotel(s) at or in the vicinity of aerodrome	In the city & near the AD.
2	Restaurant(s) at or in the vicinity of aerodrome	At AD and in the city
3	Transportation possibilities	Taxi, Car hire from AD, train, buses from the city
4	Medical Facilities	First aid at AD. Doctor on call
5	Bank and post office at or in the vicinity of aerodrome	Banks: Limited hours Post office: Limited hours
6	Tourist office	During flight timings at domestic terminal
7	Remarks	Extension counter of Vijay Bank near Domestic Terminal, Day Time Post office at Domestic Terminal, Currency Exchange Counter of Bank of Baroda and NL Forex at Intl. Terminal, ATM facility of City Bank and Yes Bank outside Domestic terminal.

## VAAH AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	Aerodrome category for fire fighting	Within ATS HR: CAT-9
2	Rescue equipment	AVBL as per category.
3	Capability for removal of disabled aircraft	As per removal of Disabled acft. Plan
4	Remarks	Tow bar for wide and medium body aircraft available with Air India and Cambata Aviation Pvt. Ltd.

## VAAH AD 2.7 SEASONAL AVAILABILITY CLEARING

1	Type(s) of clearing equipment	NIL
2	Clearance priorities	NIL
3	Remarks	NIL

AIRAC effective date AIP 2.0 Airports Authority of India

## VAAH AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Designation, surface and strength of aprons	Apron-1 (Domestic) Surface: Cement Concrete				
		Apron-2 (International) Surface: Cement Concrete  Refer Aircraft Parking / Docking Chart for Details of Both Apron:				
2	Designation, width, surface and strength of taxiways	Refer AD2.23 & Airo	craft Parking / Docking	Charts for Details		
3	Location and elevation of altimeter checkpoints	Location At Apron Elevation 179 FT				
4	Location of VOR checkpoints	TWY B holding PSN TWY H				
5	Position of INS checkpoints	NIL				
6	Remarks	1. Apron Details				
		Designation	Apron-1 (Domestic)	Apron-2 (International)		
		Location	North-West of RWY 05 beginning			
		Dimension	775M x 200M	383M x 136M		
		Shoulder	10.5M	10.5M		
		Light	Blue edge lights, flood lights.	Blue edge lights, flood lights.		
		2. Isolated Parking Stand:	g 110 X 91 M Surface: Concrete, PCN: 80/R/B/W/U, Blue edge Lights.			
		3. Refer Aircraft Parking / Docking Chart for Details				

## VAAH AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand identification signs, taxiway guidelines and visual docking/parking guidance system at aircraft stands	
2	Runway and taxiway markings and lights	RWY Markings: Designation, THR, TDZ, Centreline, Aiming point, side strip, Turn Pad Lights: THR,RWY Edge, RWY End, Stop way, Turn pad  TWY Marking: Centreline, Holding Positions, side strip, Information marking, Intermediate holding position, Edge marking Lights:Edge, Signage
3	Stop bars (if any)	NIL
4	Remarks	Heavy Aircraft (Cat D and E) taxiing via L1 to use low power.  PAX Boarding Bridge (PBB) and advanced Visual Docking Guidance System (A-VDGS) AVBL for parking Stands 32 and 33.

## VAAH AD 2.10 AERODROME OBSTACLES

In Approach/Take-off/Circling Area and at AD					
1	2	3	4	5	6
RWY/Area affected	Obstacle type	Coordinates	Elevation	Marking/LGT	Remarks
23/TKOF 05/APCH	OTHER	230356.4N 0723718.9E	181 FT	NIL	Approach Light
23/TKOF 05/APCH	TREE	230347.8N 0723702.0E	228 FT	NIL	Tree
23/TKOF 05/APCH	TREE	230344.5N 0723659.4E	231 FT	NIL	Group of Trees
23/TKOF 05/APCH	TREE	230336.1N 0723705.4E	237 FT	NIL	Tree
23/TKOF 05/APCH	TREE	230345.6N 0723710.4E	221 FT	NIL	Tree
23/TKOF 05/APCH	OTHER	230355.7N 0723714.0E	192 FT	NIL	Mobile road traffic
23/TKOF 05/APCH	TREE	230339.8N 0723704.7E	229 FT	NIL	Tree
23/TKOF 05/APCH	TREE	230339.9N 0723653.9E	246 FT	NIL	Tree
23/TKOF 05/APCH	TOWER	230328.5N 0723645.6E	280 FT	NIL	Chimney
23/TKOF 05/APCH	OTHER	230345.8N 0723713.2E	207 FT	NIL	Light Pole
23/TKOF 05/APCH	TREE	230345.7N 0723713.0E	214 FT	NIL	Group of trees
23/TKOF 05/APCH	TREE	230349.4N 0723704.5E	218 FT	NIL	Group of trees
23/TKOF 05/APCH	OTHER	230329.6N 0723656.8E	264 FT	NIL	Cellphone mast on Goverdhan Apartment
23/TKOF 05/APCH	TREE	230337.4N 0723650.9E	252 FT	NIL	Group of trees
23/APCH 05/TKOF	WALL	230521.5N 0723853.5E	205 FT	NIL	Airport BDRY Wall with F/T
23/APCH 05/TKOF	OTHER	230522.0N 0723852.8E	207 FT	NIL	Mobile road traffic
23/APCH 05/TKOF	WALL	230523.0N 0723852.0E	205 FT	NIL	Airport B.Wall with F/T
23/APCH 05/TKOF	TREE	230521.1N 0723854.4E	227 FT	NIL	Tree
23/APCH 05/TKOF	TREE	230524.3N 0723858.2E	223 FT	NIL	Tree
23/APCH 05/TKOF	OTHER	230518.3N 0723848.7E	190 FT	NIL	Approach Light
23/APCH 05/TKOF	OTHER	230519.0N 0723849.4E	190 FT	NIL	Approach Light
23/APCH 05/TKOF	BUILDING	230521.7N 0723857.0E	211 FT	NIL	Shed
23/APCH 05/TKOF	TREE	230533.0N 0723910.7E	244 FT	NIL	Group of trees
23/APCH 05/TKOF	OTHER	230522.8N 0723851.6E	202 FT	NIL	Iron sign board
In circling area and at AD	TREE	230343.6N 0723712.9E	220 FT	NIL	Tree

AIRAC effective date AIP 2.0 Airports Authority of India

In Approach/Take-off/Circling Area and at AD					
1	2	3	4	5	6
RWY/Area affected	Obstacle type	Coordinates	Elevation	Marking/LGT	Remarks
In circling area and at AD	TREE	230358.6N 0723711.2E	247 FT	NIL	Group of trees
In circling area and at AD	WALL	230524.6N 0723850.2E	204 FT	NIL	Airport BDRY Wall with F/T
In circling area and at AD	TREE	230518.7N 0723857.3E	234 FT	NIL	Group of trees
In circling area and at AD	ANTENNA	230513.8N 0723837.7E	243 FT	NIL	GP main antenna
In circling area and at AD	TREE	230507.2N 0723847.2E	259 FT	NIL	Group of trees
In circling area and at AD	TREE	230526.5N 0723905.0E	239 FT	NIL	Group of trees
In circling area and at AD	TREE	230503.5N 0723842.9E	253 FT	NIL	Group of trees
In circling area and at AD	OTHER	230524.0N 0723901.7E	216 FT	NIL	OHWT on house
In circling area and at AD	TREE	230521.5N 0723859.0E	231 FT	NIL	Tree
In circling area and at AD	OTHER	230406.4N 0723724.4E	201 FT	NIL	Wind Sock
In circling area and at AD	TOWER	230304.2N 0723739.2E	368 FT	NIL	Chimney
In circling area and at AD	TOWER	230223.8N 0723657.1E	414 FT	NIL	Chimney
In circling area and at AD	TOWER	230422.4N 0723538.1E	487 FT	NIL	NTPC Chimney
In circling area and at AD	TOWER	230416.8N 0723522.5E	473 FT	NIL	NTPC Chimney (Group)
In circling area and at AD	TOWER	230431.3N 0723540.8E	487 FT	NIL	NTPC Chimney (Group)
In circling area and at AD	TOWER	230643.5N 0723845.8E	440 FT	NIL	H.T. Pylon mast
In circling area and at AD	TOWER	230643.5N 0723910.4E	441 FT	NIL	H.T. Pylon mast
In circling area and at AD	TOWER	230537.4N 0724025.9E	375 FT	NIL	Group of Chimney
In circling area and at AD	TOWER	230310.6N 0723740.9E	369 FT	NIL	Chimney
In circling area and at AD	TOWER	230243.2N 0723712.0E	354 FT	NIL	Chimney
In circling area and at AD	TOWER	230256.1N 0723721.6E	354 FT	NIL	Chimney
In circling area and at AD	TOWER	230233.7N 0723710.2E	356 FT	NIL	Chimney
In circling area and at AD	TOWER	230241.6N 0723702.3E	344 FT	NIL	Chimney
In circling area and at AD	TOWER	230233.5N 0723657.9E	378 FT	NIL	Chimney
In circling area and at AD	TOWER	230225.5N 0723651.8E	397 FT	NIL	Chimney
In circling area and at AD	TOWER	230416.8N 0723534.9E	490 FT	NIL	NTPC Chimney
In circling area and at AD	TOWER	230415.1N 0723533.8E	497 FT	NIL	NTPC Chimney

In Approach/Take-off/Circling Area and at AD						
1	2	3	4	5	6	
RWY/Area affected	Obstacle type	Coordinates	Elevation	Marking/LGT	Remarks	
In circling area and at AD	TOWER	230535.7N 0724015.3E	364 FT	NIL	Black Chimney	
In circling area and at AD	ANTENNA	230448.2N 0723536.4E	451 FT	NIL	Cellphone mast	
In circling area and at AD	BUILDING	230608.8N 0723701.5E	365 FT	NIL	Multistory Building	
In circling area and at AD	TOWER	230318.7N 0723744.4E	349 FT	NIL	Chimney	

## VAAH AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	N C4 : 4 1 : 1 0°	A1 1 1 1
1	Name of the associated meteorological office	Ahmedabad
2	Hours of service and, where applicable, the designation of the responsible meteorological office outside these hours	H-24
3	Office responsible for preparation of TAFs and periods of validity and interval of issuance of the forecasts	Ahmedabad 9 and 24 HR
4	Availability of the trend forecast for the aerodrome and interval of issuance	Trend METAR/SPECI/Special reports with Trend 30 Min
5	Information on how briefing and/or consultation is provided	Provided with en-route forecast
6	Types of flight documentation supplied and language(s) used in flight documentation	Tabular Form (English)
7	Charts and other information displayed or available for briefing or consultation	S, U85, U70, U50 U30 U20.
8	Supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;	The state of the s
9	The air traffic services unit(s) provided with meteorological information	Ahmedabad ATS
10	Additional information, e.g. concerning any limitation of service.	Advance notice of 2 Hrs required for domestic routes and 12 Hrs notice required for INTL. routes.

AIRAC effective date AIP 2.0 Airports Authority of India

## VAAH AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations	TRUE Bearings	Dimensions of RWY (M)	Strength of pavement (PCN) and associated data) and surface of runway and associated stopways	Geographical coordinates for threshold and runway end
1	2	3	4	5
05	44.67 DEG	3505 x 45 M	94/F/B/W/T Flexible	THR: 230357.43N 0723720.65E
23	224.67 DEG	3505 x 45 M	94/F/B/W/T Flexible	THR: 230518.47N 0723847.23E

THR elevation and highest elevation of TDZ of precision APP RWY	Slope of runway and associated stopway	Dimensions of stopway (M)	Dimensions of clearway (M)	Dimensions of strips (M)
6	7	8	9	10
THR: 180.0FT TDZ: 182.0FT		NIL	NIL	3625 x 150 M
THR: 189.0FT TDZ: 189.0FT	0.07%	NIL	NIL	3625 x 150 M

Dimensions of runway end safety areas	Location and description of arresting system (if any)	Existence of an obstacle-free zone	Remarks.
11	12	13	14
90M x 90M		NIL	From beginning of RWY 05 to 2743 M is Flexible Portion with PCN 94/F/B/W/T and remaining 762 M is Rigid Portion with PCN 83/R/B/W/T.
90M x 90M		NIL	From beginning of RWY 23 to 762 M is Rigid Portion with PCN 83/R/B/W/T and remaining 2743 M is Flexible Portion with PCN 94/F/B/W/T
			0.07 % (SWY)

## VAAH AD 2.13 DECLARED DISTANCES

RWY Designator	Take-off run available TORA (M)	Take-off distance available TODA (M)	Accelerate distance available ASDA (M)	Landing distance available LDA (M)	Remarks (including runway entry or start point where alternative reduced declared distances have been declared)
1	2	3	4	5	6
05	3505	3505	3505	3505	1:50
23	3505	3505	3505	3505	1:50

## VAAH AD 2.14 APPROACH AND RUNWAY LIGHTING

Runway Designator	Type, length and intensity of approach lighting system	Runway threshold lights, colour and wing bars	Type of visual slope indicator system	Length of runway touchdown zone lights
1	2	3	4	5
05	SALS 420 M LIH	Green	PAPI LEFT/3.00 DEG MEHT (48.46FT)	
23	CAT I 750 M ALS LIH	Green	PAPI LEFT/3.00 DEG MEHT (67.06FT)	
Length, spacing, colour and intensity of runway centre line lights	Length, spacing, colour and intensity of runway edge lights	Colour of runway end lights and wing bars	Length and colour of stopway lights	Remarks
6	7	8	9	10
	3505 M 60 M LIH	Red		NIL
	3505 M 60 M LIH	Red		NIL

## VAAH AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	Location, characteristics and hours of operation	ABN	At 230434N 0723753E, H24	
	of aerodrome beacon/identification beacon (if any)	IBN	NIL	
2	Location and lighting (if any) of anemometer/	LDI	NIL	
	landing direction indicator;	Anemometer	RWY23 at 762M from beginning. RWY 05 near TWY B, lighted	
3	Taxiway edge and taxiway centre line lights;	Edge	All TWY.	
		Centre Line	NIL	
4	Secondary power supply including switch-over time;	Secondary power supply to all lighting at AD. Switch-over time :15 SEC		
5	Remarks	Apron edge and f	lood lights available.	

## VAAH AD 2.16 HELICOPTER LANDING AREA

1	Geographical coordinates of the geometric centre of touchdown and lift-off (TLOF) or of each threshold of final approach and take-off (FATO) area	
2	TLOF and/or FATO area elevation:	Not established
3	TLOF and FATO area dimensions to the nearest metre or foot, surface type, bearing strength and marking;	
4	True bearings of FATO;	Not established
5	Declared distances available	Not established
6	Approach and FATO lighting;	Not established
7	Remarks	Not established

AIRAC effective date AIP 2.0 Airports Authority of India

#### VAAH AD 2.17 AIR TRAFFIC SERVICE AIRSPACE

1	Airspace designation, geographical coordinates and lateral limits	CTR: Circular area centered on DVOR AAE (230405N 0723745E) within a 30NM radius.
2	Vertical limits	FL 70
3	Airspace classification	D
4	Call sign and language(s) of the air traffic services unit providing service;	Ahmedabad Approach, English
5	Transition altitude	4000 FT
6	Hours of applicability	H24
7	Remarks	NIL

## VAAH AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Call sign	Channel(s)	SATVOICE Number(s), if available
1	2	3	4
ACS	Ahmedabad Control	123.750 MHZ	
ACS	Ahmedabad Control	134.200 MHZ	
TAR	Ahmedabad Radar	119.800 MHZ	
APP	Ahmedabad Approach	119.800 MHZ	
TWR	Ahmedabad Tower	118.100 MHZ	
TWR	Ahmedabad Tower	119.600 MHZ	
ATIS	Ahmedabad Information	126.800 MHZ	
ALRS	Emergency Frequency	121.500 MHZ	
RADAR	Ahmedabad Radar	123.750 MHZ	
RADAR	Ahmedabad Radar	134.200 MHZ	

Logon address, as appropriate	Hours of operation	Remarks	
5	6	7	
	H24	Primary Frequency . Primary Frequency RCAG installed at Udaipur and Bhuj	
	H24	Secondary Frequency	
	H24	NIL	
	H24	NIL	
	H24	Secondary Frequency	
	H24	Primary Frequency	
	H24	NIL	
	H24	NIL	
	H24	Primary Frequency. Primary Frequency RCAG installed at Udaipur and Bhuj	
	H24	Secondary Frequency. RCAG installed at Indore	

VAAH AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aids, magnetic variation and type of supported operation for ILS/ MLS, basic GNSS, SBAS and GBAS, and for VOR/ILS/MLS station used for technical lineup of the aid	Identification	Frequency(ies), Channel number(s), Service provider, and reference path identifier(s) (RPI), as appropriate	Hours of operation, as appropriate;
1	2	3	4
LOC 23	IAHD	110.300 MHz	H24
GP 23		335.000 MHz	H24
DME ILS 23	IAHD	CH40X	H24
MKR	АН	215.000 kHz	H24
DVOR/DME	AAE	113.100 MHz CH78X	H24
Geographical coordinates of the position of the transmitting antenna	Elevation of transmitting antenna of DME/ elevation of GBAS reference point	Service volume radius from the GBAS reference point	Remarks
5	6	7	8
230349.5N 0723712.2E			
230514.5N 0723837.0E			3 DEG
230514.5N 0723837.0E	213 FT		Colocated with GP23
230829.0N 0724158.8E			LO
230405.4N 0723744.8E	219 FT		

## VAAH AD 2.20 LOCAL AERODROME REGULATIONS

#### **Pushback and Taxi Procedure:**

S.No.	Aircraft Stand	Pushback/Taxi Procedure
1	1 to 4	Turn left and follow lead out line to join apron stand taxi lane L1.
2	5 to 7 and 22 to 24	Turn right and follow lead out line to join taxiway B.
3	8 to 12	Aircraft from stand no 8 to 12 to push back facing south east and align on apron stand taxi lane thereafter follow lead out line to join taxiway B.
4	13 R to 17R	Aircraft from stand no 13R to 17R to pushback facing south-east and align on apron stand taxi lane L3 and thereafter follow apron taxi lane L3 and L1.
5	17	Aircrafts from stand no 17 to pushback until abeam stand no 18, Thereafter turn right to align on apron stand taxi lane L3 and thereafter follow apron stand taxi lane L3 & L1.
6	18 and 20	Aircraft from stand no 18 and 20 to turn right and follow lead out line to join apron stand taxi lane L3 followed by L1.
7	19	Aircraft from stand no. 19 to turn left and follow lead out to join apron stand taxi lane line L3 followed by L1.

AIRAC effective date AMDT 01/2018 Airports Authority of India

8	21	Aircraft from stand no. 21 to turn left and follow lead out line to join apr stand taxi lane L1 behind stand no.14.	
9	31	Aircraft from stand no. 31 push back on taxiway G, then follow lead out lin to join taxiway H.	
10	32 to 36	Aircraft from stand no. 32 to 36 push back facing North East and align on apron taxi lane, thereafter follow lead out line to join taxiway H.	
11	ATC may ask code C, D or E aircraft taxiing on taxiway P to hold on intermediate holding position "P1" to provide rapid access for fire-fighting & rescue vehicles to runway. Marking and signage board for "P1" provided for easy identification.		

#### VAAH AD 2.21 NOISE ABATEMENT PROCEDURES

Consistent with safety of aircraft operations and in consideration of high intensity runway operations, pilots should minimise the use of reverse thrust after landing to reduce disturbance in areas adjacent to the aerodrome.

#### VAAH AD 2.22 FLIGHT PROCEDURES

NIL

#### VAAH AD 2.23 ADDITIONAL INFORMATION

- 1. Details of aircraft stands available at Apron-1 (Domestic) of Ahmedabad International Airport are as follows:
- Stand No. 1 to 7 are Power-in/Power-out
- Stand No. 8 to 21 are Power-in/Pushback
- Stand No. 22 to 24 are Power-in/Power-out
- 2. Details of aircraft stands available at Apron-2(International) of Ahmedabad International Airport are as follows:
- Stand No. 31 is Power-in/Power-out
- Stand No. 32 to 36 are Power-in/Pushback

## 3. Taxiways:

S.No	TWY Designation	Location	PCN	Length (M)	Width (M)	Shoulder (M)	Marking & Lighting
1.	A		72/R/B/W/T		23M, Concrete		The link between dumbbell of RWY 05 to the Apron and vice-versa, length 308.45M.
2.	В		Rigid Portion 58/R/B/W/T Composite Portion 101/F/B/W/T		23M, Bitumen		186 M from beginning of RWY 05. Links RWY to Apron
3.	С		77/R/B/W/T		23M, Concrete		Link BTN RWY and parallel TWY at 2545m from beginning of RWY23.
4.	D		84/R/B/W/T		23M, Concrete		Link BTN RWY and parallel TWY at 1711m from beginning of RWY 23.
5.	F				23M, Concrete		Link opposite to TWY B south of RWY 05/23 connecting Isolation bay at 188m from beginning of RWY05
6.	P		84/R/B/W/T (BTN D & B) 81/R/B/W/T (BTN B & A)		23M, Concrete		Parallel TWY north of RWY 05/23 of length 1279m from TWY B intersection and length between TWY A and B is 176.60m
7.	L1		64/R/B/W/T				ACFT stand taxi lane from B to stand 5,8 to 13 and 22 to 24

AIRAC effective date AMDT 01/2018 Airports Authority of India

AIP India

							23 MAT 20
8.	L2						ACFT stand taxi lane from L1 to stand no. 1, 2, 3, 4, 6 and 7 restricted to aircraft wing span upto 30m
9.	L3						ACFT stand taxi lane from L1 to stand no.14 to 21.
10.	G	701M beyond threshold of RWY 05 at 028 DEG North	65/R/B/W/T	152.25	23	10.5	1. Centre line, Edge marking, Intermediate Holding Position 2. Edge
11.	Н	1120M beyond threshold of RWY 05 at 034 DEG North	65/R/B/W/T	152.25	23	10.5	lighting and Signage. 3. VOR check point at TWY H

- **4.** Routine Wx. Radar observations taken at 0150, 0250, 0550, 0850, 1050, 1350, 1450, 1750, 2050 and 2250. during pre monsoon, monsoon and post monsoon seasons in case of no echoes. In case echoes are observed additional observations are taken at 0350, 0450, 0650, 0750, 0950, 1550, 1650, 1850, 1950 and 2150. Observations are also taken in other seasons during bad Wx. Conditions.
- **5.** Obstacle Light provided on lightening arrestor pole on Antenna of the ASR/MSSR building antenna height 237 FT Coordinates 230412N 0723754E distance from centerline of RWY 870 FT south of RWY, distance from beginning of RWY 05-3350 FT.
- 6. All arriving aircraft (Code C) from RWY 23 expect to vacate via TWY C LDA 2545 Meters.
- 7. Turn pad for intermediate DEP RWY23 is available for Code"C" Acft A321/B737. The details of this turn pad is as below:
- i. Location: 762M from beginning RWY23 or 900M NE from TWY D intersection with RWY.
- ii. Surface: Bituminous
- iii. PCN: 94/F/B/W/T
- iv. Light: Edge Light
- v. Marking: Yellow Colour Turn Pad Marking
- vi. Critical aircraft: Code 'C' A321/B737
- vii. For departure from intermediate turn pad RWY23 following distances are available -

TORA (M)	TODA (M)	ASDA (M)
2743	2743	2743

viii. Departure from this intermediate turn pad can be initiated by ATC as intermediate departure RWY 23 with concurrence of pilot or requested by pilot.

**8**. Intersection Take Off Run Available as follows:

RWY DESIGNATION	TWY intersection	TORA
RWY 23	TWY D	1794 M
RWY 23	TWY C	960 M
RWY 05	TWY B	3319 M
RWY 05	TWY C	2545 M
RWY 05	TWY D	1711 M

- 9. Btn 0130-1730 daily(GND to 550FT/167M AMSL), tethered helium balloon operation near Ahmedabad
- i. Location: 23 00 25.56806N 072 35 51.98878E. 205 radial 4NM from AAE VOR.
- ii. Colour and marking: white with blue orange and black markings.
- iii. Lighting: fitted with anti collision light.
- iv. Size: diameter of the balloon 22.28M
- v. Maximum height of the balloon 110.253M AGL.
- vi. Maximum top elevation 166.612M AMSL.
- vii. Maximum drift of the balloon 30M either side.
- viii. Pilots to exercise caution.
- 10. ADS-B Reception Frequency 1090 MHz available.

AIRAC effective date AMDT 01/2018 Airports Authority of India

AD 2 VAAH -16 19 JUL 2018 AIP India

#### 11. LOW VISIBILITY PROCEDURES:

#### 11.1 BACKGROUND:

Until the latest amendment of DGCA Civil Aviation Requirements (CAR) Section 8, Series 'C', Part-1 on All-weather Operations, low visibility procedures were required at aerodromes for the purpose of ensuring safe operations during categories 2 and 3 approaches and/or low visibility take-offs (LVTO). However, in latest amendment to CAR (Rev. 10) Para 5.3 following provision regarding low visibility procedures is added. 'An operator shall not conduct take-off with RVR/ visibility less than standard category 1 conditions of 550M RVR/800M visibility unless low visibility procedures are enforced.' This provision necessitated the need of low visibility procedures for accommodating/permitting departures in visibility/RVR less than 800M/550M even at such airports where there are no CAT-II and CAT-III operations. Accordingly, low visibility procedures have been developed for Ahmedabad International Airport to accommodate/permit departures in visibility/RVR less than 800M/550M from RWY 23 (runway served with RVR instruments).

#### **11.2. DEFINITIONS:**

**11.2.1 Low Visibility Procedures (LVP):** Specific procedures applied at an aerodrome for the purpose of ensuring safe operations during Categories II and III approaches and/or low visibility take-offs.

**Note:** as per para 5.3 of CAR on All Weather Operations, an operator shall not conduct Take-off with RVR/Visibility less than standard CAT-I conditions of 550m RVR/800m Visibility unless low visibility procedures are enforced.

- **11.2.2 Manoeuvring Area:** That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.
- **11.2.3 Runway Visual Range:** The range over which the pilot of an aircraft on the centerline of a runway can see the runway surface markings or the lights delineating the runway or identifying its centreline.
- **11.2.4 Aerodrome Operating Minima:** The limits of usability of an aerodrome for:
- a. take off, expressed in terms of runway visual range and / or visibility and, if necessary, cloud conditions.
- b. landing in 2D instrument approach operations, expressed in terms of visibility and/or runway visual range; minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions; and
- c. landing in 3D instrument approach operations, expressed in terms of visibility and/or runway visual range and decision altitude/height(DA/H) appropriate to the type and/or category of the operation.
- **11.2.5 Visibility:** Visibility for aeronautical purposes is the greater of: a. The greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background;
- b. The greatest distance at which lights in the vicinity of 1,000 candelas can be seen and identified against an unlit background.
- **Note 1.** The two distances have different values in air of a given extinction coefficient, and the latter b) varies with the background illumination. The former a) is represented by the meteorological optical range (MOR).
- **Note 2.** The definition applies to the observations of visibility in local routine and special reports, to the observations of prevailing and minimum visibility reported in METAR and SPECI and to the observations of ground visibility.

#### 11.2.6 Abbreviations:

ADC: Aerodrome Control

ARFF: Airport Rescue and Fire Fighting Services

ATC: Air Traffic Control

AMDT 01/2018 - DRAFT - Airports Authority of India

AIP AD 2 VAAH -17 India AD 12 VAAH -17 19 JUL 2018

ATM: Air Traffic Management

**CFT**: Crash Fire Tender

ATIS: Automatic Terminal Information Service

DG: Diesel Generating Set

LVP: Low Visibility Procedures

**MET**: Meteorology

RWY: Runway

RVR: Runway Visual Range

SMC: Surface Movement Control

**SP:** Safeguarding Procedures

TDZ: Touchdown Zone

TWR SUP: Tower Supervisor

TWY: Taxiway

WSO: Watch Supervisory Officer

#### **11.3. GENERAL:**

The Low Visibility Procedure (LVP) incorporates safeguarding measures to mitigate runway incursions and defines operational restrictions to ensure safe Airside Operations taking into account the available Aerodrome facilities.

#### **11.4. MINIMUM REQUIREMENTS:**

The following Aeronautical Ground lights and RVR equipment shall be serviceable to the required standard to support Low Visibility Procedures:

- a. Runway edge lights,
- b. Runway end lights,
- c. Real time TDZ RVR.
- d. Stand by Power supply to maintain switch over time of 1 Second for Runway

Edge Lights and Runway End Lights. This requirement can be met with the help of DG Set and/or UPS.

## 11.4.1 Unserviceability of Aeronautical Ground Lights/ Equipment before Implementation of LVP.

Low Visibility Procedures will not be implemented when any of the light/equipment mentioned in para 4 above is unserviceable or is not maintained as per the required standard.

Airports Authority of India - DRAFT - AMDT 01/2018

Aeronautical Ground Lighting Facility	Un-serviceability	Restrictions
	More than 15% of all lights are unserviceable	
Runway Edge lights	Any two consecutive lights or more are unserviceable	LVP operations will be suspended.
	More than 15% of all lights are unserviceable	
Runway End lights	Any two consecutive lights or more are unserviceable	LVP operations will be suspended.
Standby Generators/UPS	Any of the generator/UPS is unserviceable	LVP operations will be suspended.

#### 11.4.2 Unserviceability of Aeronautical Ground Lights/ Equipment after Implementation of LVP.

When any of the light/equipment mentioned in para 4 above becomes un-serviceable or fails to meet the required standard during periods of LVP, TWR/SMC shall advise the aircraft accordingly and LVP shall be suspended and information to this effect shall be included in ATIS broadcast.

#### 11.5. SAFEGUARDING PROCEDURES:

Safeguarding Procedures (SP) are instructions for relevant airport, departments and airside operators to prepare ground services and facilities for low visibility operations in order that when LVP are implemented all safeguarding procedures are complete. Duty Officer Tower/Tower Supervisor will initiate and co-coordinate with all the concerned agencies for completion of safeguarding procedures before implementation of Low Visibility Procedures.

#### 11.5.1 Safeguarding Procedures shall be initiated when:

- a. The Visibility/RVR is less than 1200m and visibility/RVR is forecast to deteriorate to 800m or less; and/or
- b. The cloud ceiling is less than 400ft and forecast to fall to 200ft or less.

## 11.5.2 Safeguarding procedures include:

- a. Positioning of 1 CFT each at the two predetermined positions at Glide path RWY 23 and at fire approach road near TWY Delta.
- b. Stopping of all maintenance works on the manoeuvring area as well as removal of all men and mobile equipment from the said area.
- c. Ensuring availability of secondary power supply for change over time of maximum one second for RWY Edge and RWY End lights supported by UPS.

(**NOTE:** RWY Edge and Rwy End lights may continue to operate on main power supply during safeguarding Procedures. Whenever, LVP is to be implemented as per para 6 below, the RWY Edge and RWY End lights shall be put on Standby Power Supply (DG set or UPS). This operation need to be completed before LVP is implemented.

(As UPS is available at Ahmedabad International Airport and is capable of maintaining the required AGL system (refer table under para 4.1) with one second of Switch Over time with Main Supply, the main supply can continue to be primary supply and the Generator Supply can be kept as Standby Power supply. In case of UPS is unserviceable, Generator supply will become primary source of power supply and Main power supply shall act as standby power supply.)

d. The appropriate Aeronautical ground lights must have been inspected during the hour preceding implementation of LVP, and thereafter once every two-hour period. These lighting inspections should be accorded priority and, if necessary, aircraft operations may be delayed.

AIRAC effective date AMDT 01/2018 Airports Authority of India

#### 11.6. LOW VISIBILITY PROCEDURES:

#### 11.6.1 Implementation of Low Visibility Procedures:

SMC shall inform Duty Officer Tower controller whenever Visibility/RVR reduces to 800 Meters or below and/ or cloud ceiling is at 200 ft or below. Tower supervisor shall coordinate with all the agencies to confirm whether the Safeguarding procedures have been completed or not. When Visibility/RVR falls below 800m/550M and or Cloud Ceiling is 200 ft or below and safeguarding procedures are complete, Tower supervisor will implement Low Visibility Procedures. Duty Officer Tower shall inform all users of the imposition of low visibility procedures.

#### 11.6.2 Action by various units during LVP:

- a. Duty MET Officer shall keep Duty Officer Tower informed of any change in Visibility/ RVR.
- b. SMC shall ensure that the towing of aircraft is done under escort of "Follow Me" vehicles. "Follow Me" shall follow the route cleared by ATC;
- c. SMC shall not permit any ground run on the manoeuvring area except idle power run on the stands;
- d. SMC shall ensure that "Follow Me" services are provided to pilots on request;
- e. The number of the vehicles on the manoeuvring area shall be restricted to bare minimum and records of all vehicles operating on the manoeuvring area shall be maintained by SMC.
- f. The following may be included in ATIS. "LOW VISIBILITY PROCEDURES IN FORCE".
- g. TWR shall permit departures only from the beginning of the Runway in use.
- h. Whenever visibility/ RVR is less than 800/550M, duty officer tower shall confirm from pilot that the reported RVR value is within minima before issuing take-off clearance.
- i. In-Charge Electrical shall continuously monitor the main and Standby Power supply to ensure change over time of maximum one second for RWY Edge and RWY End lights during low visibility operations and report any unserviceability to Tower immediately

#### 11.7. TERMINATION OF LOW VISIBILITY PROCEDURES:

- a. When Visibility/RVR improves to 800M/550 M or more and cloud ceiling is 200 feet or higher and trend is for improvement, Tower Supervisor/Duty Officer Tower would terminate operations of LVP. He may obtain advice from Duty Met. Officer regarding improvement in weather conditions before the termination of LVP.
- b. Duty officer Tower shall inform SMC/ARFF/In-charge electrical-Engg. regarding the termination of LVP operations.
- c. On cancelling of LVP, following message shall be included in two subsequent ATIS broadcasts. "LOW VISIBILITY PROCEDURES CANCELLED".
- d. If SP are implemented and LVP are not subsequently implemented and the visibility/RVR improves and is more than 1200 m and/or the cloud ceiling is 400ft or higher and both are forecast to remain above the required SP criteria, Tower Supervisor/Duty Officer Tower may cancel SP.

## 11.8. ACTIONS BY OTHER AGENCIES (AIRLINES, REFUELLING COMPANIES, CATERING AGENCIES, ETC.)

- a. Every year before commencement of monsoon/winter season, a meeting will be held by Airport Director, to inform all airlines and agencies operating at airport about their roles/responsibilities and create awareness to ensure cooperation for safe airport operations during periods of low visibility.
- b. All the agencies shall ensure that staff and drivers are suitably trained during Low Visibility operations.
- c. A refresher program for ATCO's and personnel responsible for airside operations shall be conducted every year.

d. All agencies operating in the operational area shall ensure that only those vehicles that are absolutely essential for aircraft operations operate in the operational area during periods of low visibility. The drivers of these vehicles should keep a look out for taxiing aircraft and other vehicles to prevent accidents.

- e. All the vehicles must have their obstruction lights "ON" during Low Visibility Procedures operations.
- f. All instructions/sign boards provided for vehicular movement area/service roads, must be followed while operating in the operational area.

## VAAH AD 2.24 CHARTS RELATED TO AN AERODROME

- 1. Aerodrome Chart
- 2. Aircraft Parking/Docking Chart Apron-1
- 3. Aircraft Parking/Docking Chart Apron-2
- 4. Aerodrome Obstacle Cart Type- A (Operating Limitations) RWY 05
- 5. Aerodrome Obstacle Cart Type- A (Operating Limitations) RWY 23
- 6. ILS (Z) Procedure RWY 23
- 7. ILS (Y) Procedure RWY 23
- 8. VOR Procedure RWY 05
- 9. VOR Procedure RWY 23

AIRAC effective date AMDT 01/2018 Airports Authority of India

AERODROME CHART

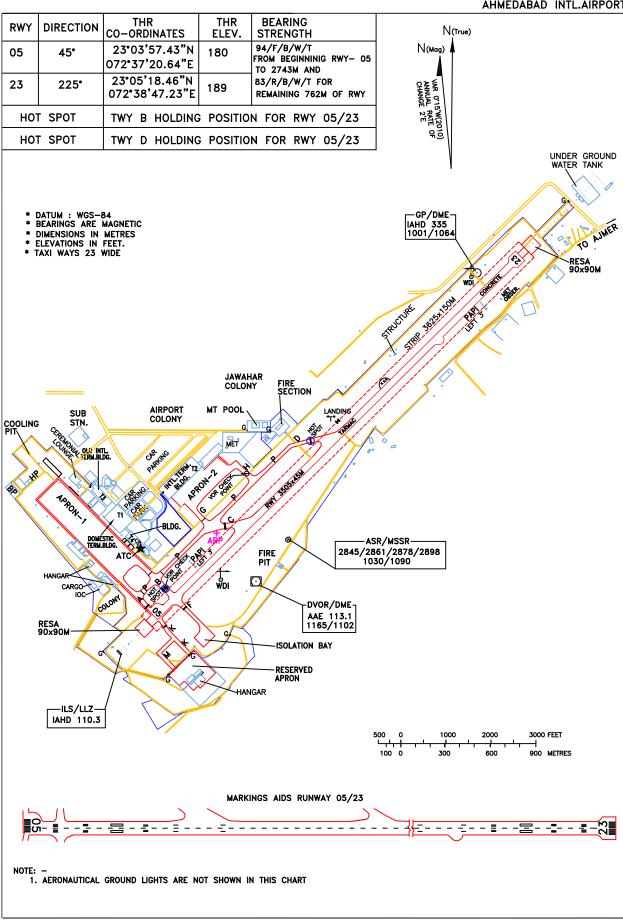
23°04'16.29"N 072°37'35.16"E

**ELEV. 189** 

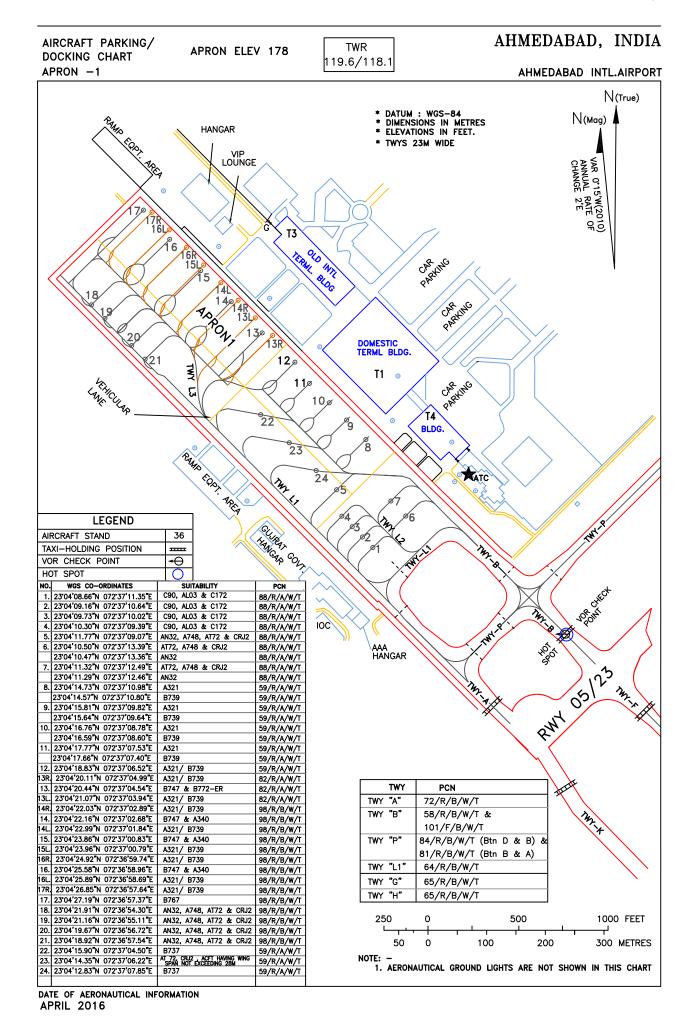
**TWR** 119.6/118.1

## AHMEDABAD, INDIA

AHMEDABAD INTL.AIRPORT



DATE OF AERONAUTICAL INFORMATION JUNE 2015



AHMEDABAD, INDIA AIRCRAFT PARKING/ **TWR** APRON ELEV 182 DOCKING CHART 119.6/118.1 APRON -2 AHMEDABAD INTL.AIRPORT N(True) N (Mag) \* DATUM : WGS-84 \* DIMENSIONS IN METRES \* ELEVATIONS IN FEET. TWYS 23M WIDE 26 300 APROM B 0 3 2nd 05/23 TWY-C ARP—23°04'16.29"N 072°37'35.16"E 250 500 FEET 0 250 LEGEND AIRCRAFT STAND 36 100 50 0 50 150 TAXI-HOLDING POSITION ----200 METRES VOR CHECK POINT **P** TWY PCN NO. WGS CO-ORDINATES SUITABILITY **PCN** TWY "A" 72/R/B/W/T 23°04'24.04"N 072°37'26.62"E B737/A321 63/R/B/W/T 31. TWY "B" 58/R/B/W/T & 23'04'26.02"N 072'37'28.01"E B747 63/R/B/W/T 101/F/B/W/T 23°04'25.68"N 072°37'28.38"E A321/B739 63/R/B/W/T TWY "P" 84/R/B/W/T (Btn D & B) & 33. 23°04'27.70"N 072°37'29.81"E B747 63/R/B/W/T

23'04'32.36"N 072'37'35.54"E A321/B739

DATE OF AERONAUTICAL INFORMATION

JUNE 2015

23°04'27.36"N 072°37'30.18"E

23°04'29.03"N 072°37'31.97"E

34. 23°04'29.37"N 072°37'31.60"E

35. 23°04'30.83"N 072°37'33.91"E

36. 23°04'32.70"N 072°37'35.16"E

A321/B739

A321/B739

A321/B739

B744/A124

B747

63/R/B/W/T

63/R/B/W/T

63/R/B/W/T

63/R/B/W/T

63/R/B/W/T

63/R/B/W/T

81/R/B/W/T (Btn B & A)

64/R/B/W/T

65/R/B/W/T

65/R/B/W/T

1. AERONAUTICAL GROUND LIGHTS ARE NOT SHOWN IN THIS CHART

TWY "L1"

TWY "G"

TWY "H"

AD 2 VAAH 1-7 INDIA / AHMEDABAD

AERODROME OBSTACLE CHART **ELEVATIONS IN FEET** AHMEDABAD INTL. AIRPORT/RWY 05 ALL OTHER DIMENSIONS IN METRES TYPE-A (OPERATING LIMITATIONS) MAGNETIC VARIATION 0° (2010) 500 RWY - 05/23**METRES** FEET DECLARED DISTANCES 300□ RWY05 RWY23 250 3505 TAKE-OFF RUN AVAILABLE 3505 3505 TAKE-OFF DISTANCE AVAILABLE 3505 3505 ACCELERATE STOP DISTANCE AVAILABLE 3505 200 3505 LANDING DISTANCE AVAILABLE 3505 300 150 SLOPE 1.2% 100 50-VERTICAL SCALE 3505 3600 6 3900 4200

4&5 NO SIGNIFICANT OBSTALES BEYOND THIS POINT 1 : 1500 4800 RWY STRIP 3625 X 150 045°(M)— -180SF **€**6)227 -|60|-**(5)**212 2205 3211 HORIZONTAL SCALE - 1: 15000 NOTES: METRES 1. The objects that have been shielded due 500 to presence of other higher objects have LEGEND not been shown in this chart. 2. Obstructions in the form of trees which PROFILE AMENDMENT RECORD PLAN are being cut or pruned have not been NO. DATE ENTERED BY taken into consideration for establishing 1 IDENTIFICATION NUMBER FEET 20.05.14 Airport name changed as per threshold displacement. Jt. GM (ATM-SQMS), Ahmedabad, 3. Datum — All Elevations are AMSL. TREE OR SHRUB \* email dt. 15.05.14. 4. Periphery roads without traffic are not obstacles.

AERONAUTICAL INFORMATION UPTO-20th MAY 2014 वैमानिक सूचना . 20 मई, 2014 तक

 $\odot$ 

**-186** 

POLE, TOWER, SPIRE, ANTENNA ETC.

RWY ELEV. (SPOT)

SHED

COMPILED BY-CARTO-ACC, AIRPORTS AUTHORITY OF INDIA संग्रहित किया : कार्टी-वै.मा.प्र. यूनिट, भारतीय विमानपत्तन प्राधिकरण

ORDER OF ACCURACY

3.0m

1.0ft

HORIZONTAL

VERTICAL

5. Consult Notam for latest information.

(Taken upto 2012)

6. Rwy directions rounded to nearest degree(Magnetic)

7. All obstacles shown in this chart are based on aeronautical obstacle Survey April, 2012.

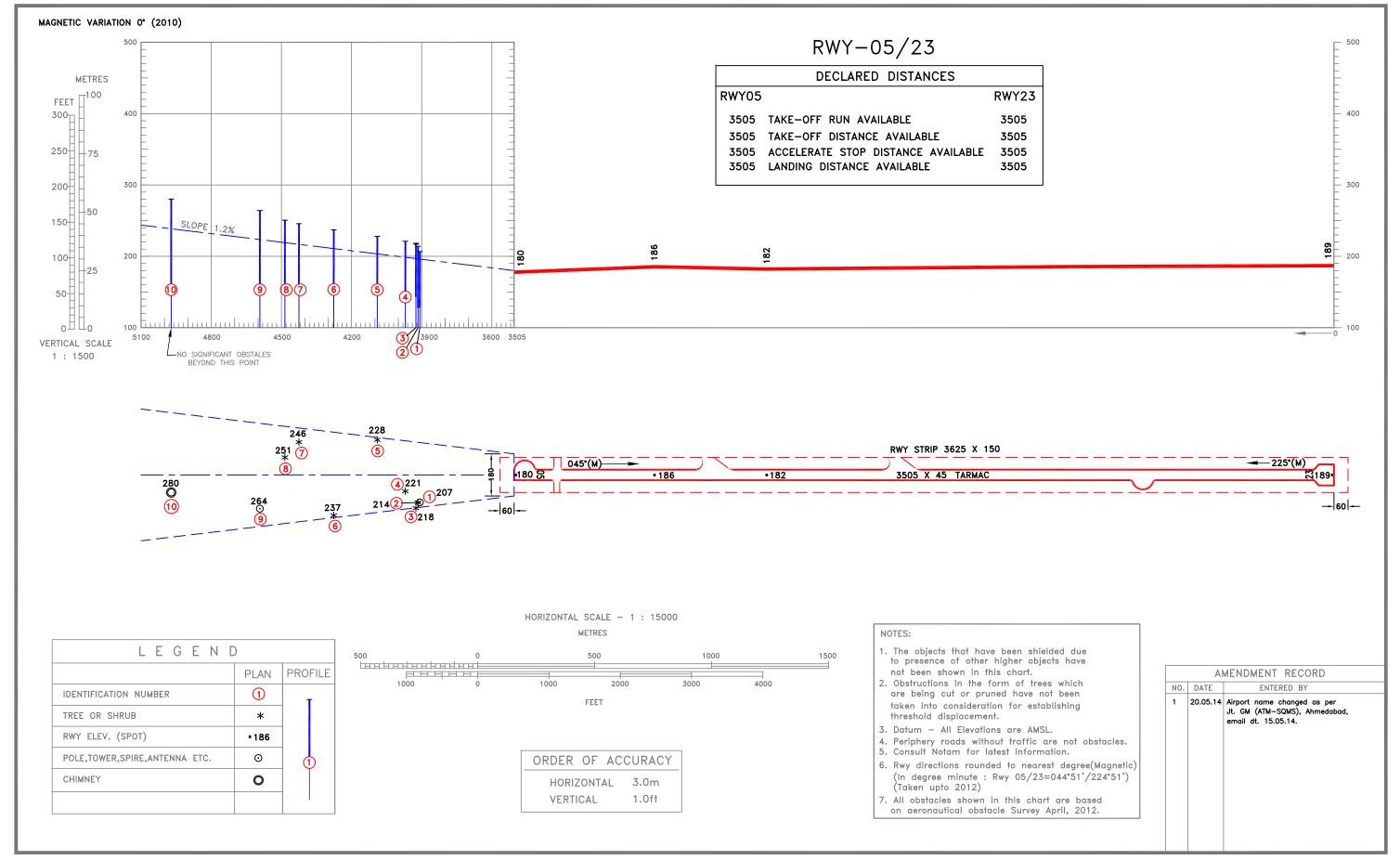
(In degree minute: Rwy 05/23=044°51'/224°51')

CHART No.AAI/17-OBS/CARTO-ACC/2014 चार्ट सं. भा.वि.प्रा. / 17-अव. / कार्टी-वै.मा.प्र. / 2014

ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

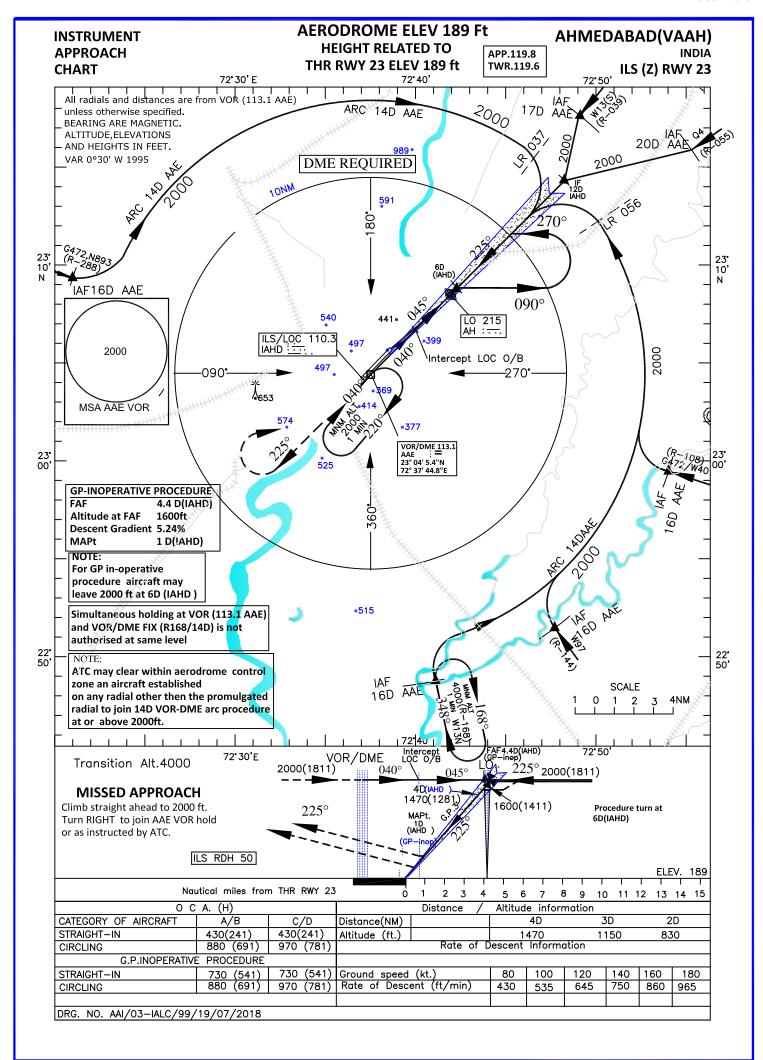
# AERODROME OBSTACLE CHART TYPE-A (OPERATING LIMITATIONS)

INDIA / AHMEDABAD AHMEDABAD INTL. AIRPORT/RWY 23

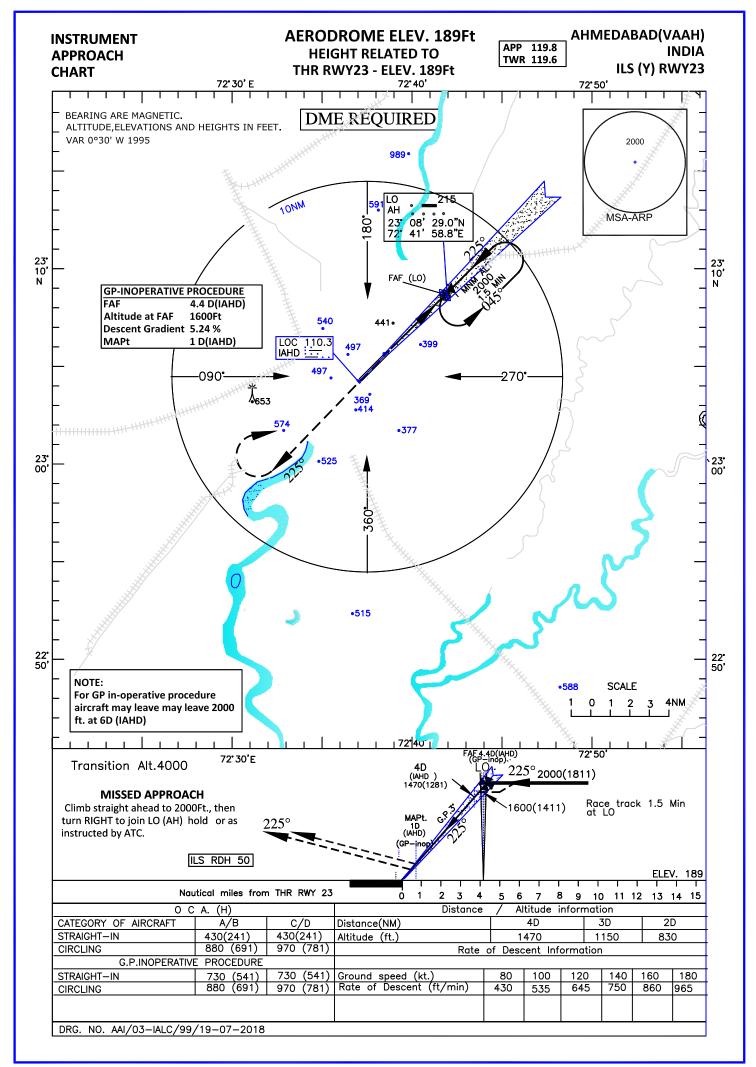


AERONAUTICAL INFORMATION UPTO-20th MAY 2014 वैमानिक सूचना . 20 मई, 2014 तक

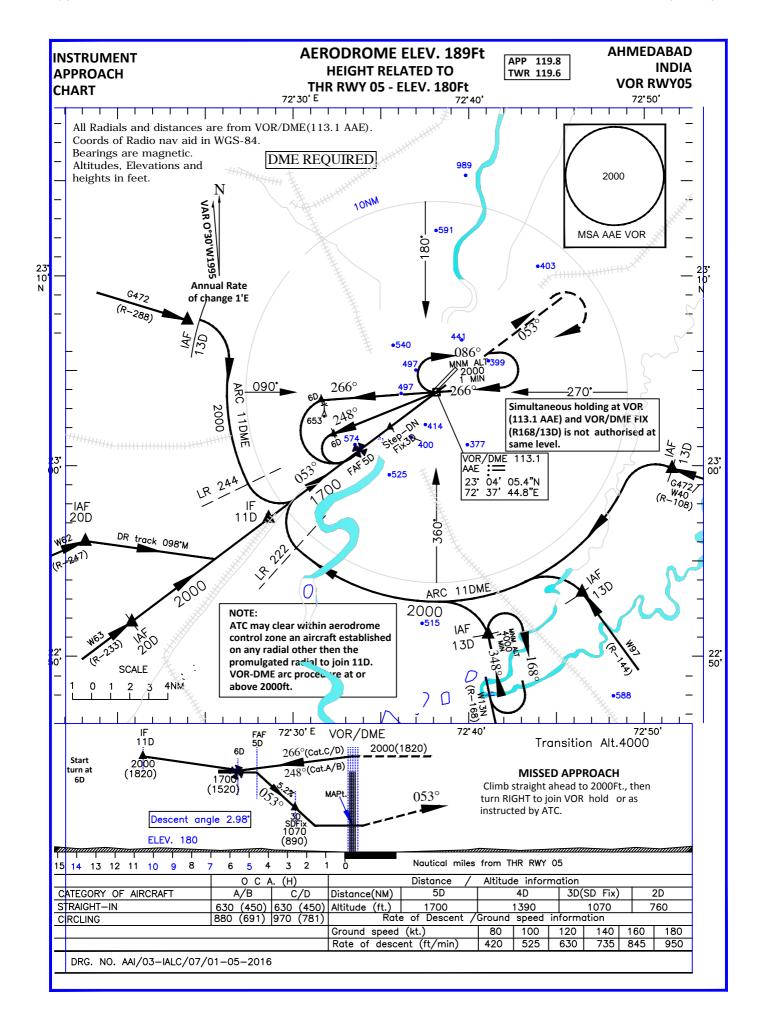
COMPILED BY-CARTO-ACC, AIRPORTS AUTHORITY OF INDIA संग्रहित किया : कार्टो—वै.मा.प्र., भारतीय विमानपत्तन प्राधिकरण CHART No.AAI/18-OBS/CARTO-ACC/2014 चार्ट सं. भा.वि.प्रा. /18-अव. /कार्टी-वै.मा.प्र. /2014



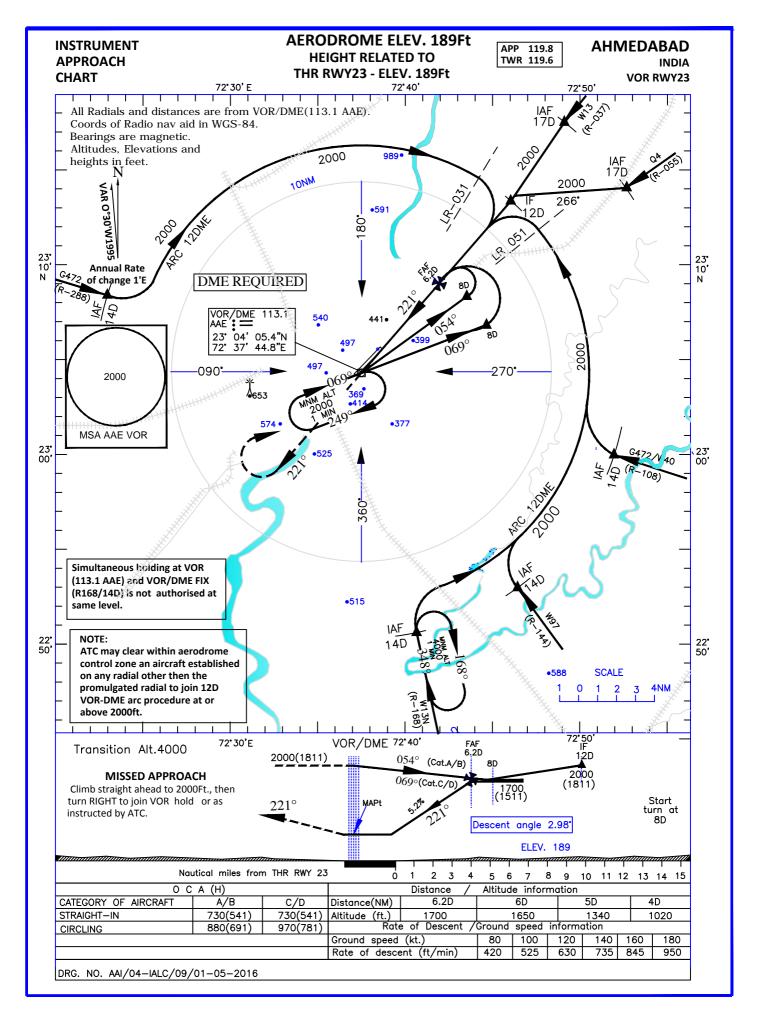
Airports Authority of India AMDT 01/2018



Airports Authority of India AMDT 01/2018



Airports Authority of India eAIP 2.0



Airports Authority of India eAIP 2.0