

AD 2. AERODROMES**VASU AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

VASU - SURAT / DOMESTIC

VASU AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	Aerodrome reference point coordinates and its site	210658N 0724431E Mag Brg 32.50 DEG/715M from physical extremity of RWY 04
2	Direction and distance of aerodrome reference point from the center of the city or town which the aerodrome serves	14 Km South-West of Surat Railway Station
3	Aerodrome elevation and reference temperature	29 FT / 42.0 DEG C
4	Magnetic variation, date of information and annual change	0.50 DEG W (2010) /0.03 DEG E
5	Name of aerodrome operator, address, telephone, telefax, e-mail address, AFS address, website (if available)	Airport Director Airports Authority of India Surat Airport,Dumas Road,, Surat - 394550
	Telephone:	+91-261-2720109 +91-9429892020
	Fax:	+91-261-2720195
	AFS:	VASUYHYX
	Email:	apdsurat@aai.aero
6	Types of traffic permitted (IFR/VFR)	IFR/VFR
7	Remarks	NIL

VASU AD 2.3 OPERATIONAL HOURS

1	Aerodrome Operator	MON-FRI 0400-1230 UTC (0930-1800 IST) SAT, SUN + HOL: NIL
2	Custom and immigration	Not Available
3	Health and sanitation	NIL
4	AIS briefing office	NIL
5	ATS reporting office (ARO)	NIL
6	MET Briefing office	As ATS
7	Air Traffic Service	AS ATS
8	Fuelling	As ATS
9	Handling	Not Available
10	Security	H24
11	De-icing	Not Available
12	Remarks	The ATS approved hourly RWY TFC handling capacity is as follows: Max number of ARR and DEP -12 (the minimum spacing between two successive arrivals shall be more than five min) Max number of arrivals only - 06 Max number of departures only - 10

VASU AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Not Available
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2	Fuel and Oil types	JET A1 ATF
3	Fuelling facilities and capacity	Fuelling Equipment: Refueller Services: Single product of Jet A1 and supplying directly to aircraft Discharge Capacity : 12 Litres/Sec Capacity: 29KL
4	De-icing facilities	Not Available
5	Hangar space for visiting aircraft	Not Available
6	Repair facilities for visiting aircraft	Not Available
7	Remarks	NIL

VASU AD 2.5 PASSENGER FACILITIES

1	Hotel(s) at or in the vicinity of aerodrome	Available in City
2	Restaurant(s) at or in the vicinity of aerodrome	Available in City
3	Transportation possibilities	Available in City
4	Medical Facilities	Available in City
5	Bank and post office at or in the vicinity of aerodrome	Banks: Available in City Post office: Available in the city.
6	Tourist office	Available in City
7	Remarks	NIL

VASU AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	Aerodrome category for fire fighting	Within ATS HR: CAT-7
2	Rescue equipment	03 CFT, 02 Ambulance, Extinguishing Agent- Aqueous Film Forming Foam, 03 Proximity Suite, 06 BA Sets, Static water tank of 83,000 litres capacity.
3	Capability for removal of disabled aircraft	Equipment/Facility not available with AAI. Action will be initiated as per Disabled Aircraft removal Plan.
4	Remarks	NIL

VASU AD 2.7 SEASONAL AVAILABILITY CLEARING

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

VASU AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Designation, surface and strength of aprons	Designator: Apron Surface: Concrete Strength: PCN 62/R/C/W/T
2	Designation, width, surface and strength of taxiways	Designator: A Width: 23 M Surface: Concrete Strength: PCN 62/R/C/W/T Designator: B Width: 23 M Surface: Concrete Strength: PCN 62/R/C/W/T
3	Location and elevation of altimeter checkpoints	On the TWYs 'A' & 'B'. Elevation: 25 FT

4	Location of VOR checkpoints	TWY 'A' TWY 'B'
5	Position of INS checkpoints	
6	Remarks	<p>i.TWY A located at 1134 M from RWY 04. Dimensions 200M X 23 M</p> <p>ii.TWY B located at 1369 M from RWY 04. Dimensions 200M X 23 M</p> <p>iii.Location of Isolation bay is towards N-E of threshold RWY 04. Dimension -75MX65M. Width and length of link TWY 23M and 228M. Surface of isolation bay and link taxiway - Concrete. PCN of isolation bay and link taxiway - 66 R/A/W/T</p> <p>iv.Refer Aircraft Parking/Docking Chart for Aircraft Stands' details</p>

VASU 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	TWY guidance signals at all the intersection with TWY and RWY. Standard Markings at apron. Parking stands are marked with numbers from 1 to 4. Taxiing Guidance provided on R/T. Nose in guidance at aircraft stands.
2	Runway and taxiway markings and lights	<p>RWY Markings: Edge, Designation, THR, TDZ, Aiming Point, Centreline</p> <p>RWY Lighting: THR, RWY Edge, RWY END.</p> <p>TWY Markings: Edge, Centreline, TWY</p> <p>RWY Holding Position, VOR Check location</p> <p>TWY Lighting: Edge</p>
3	Stop bars (if any)	NIL
4	Remarks	NIL

VASU 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
22/TKOF 04/APCH	OTHER	210636.8N 0724416.0E	23 FT	NIL	Approach Light
22/APCH 04/TKOF	TREE	210754.4N 0724522.0E	82 FT	NIL	Group of Trees
22/APCH 04/TKOF	TREE	210752.2N 0724521.8E	80 FT	NIL	Group of Trees
22/APCH 04/TKOF	OTHER	210732.9N 0724512.1E	30 FT	NIL	Approach Light
22/TKOF 04/APCH	OTHER	210733.5N 0724508.0E	32 FT	NIL	Airport wire fencing
In circling area and at AD	BUILDING	210814.8N 0724401.7E	198 FT	NIL	Narmada Cement Factory
In circling area and at AD	BUILDING	210823.0N 0724420.2E	184 FT	NIL	Ambuja Cement Factory
In circling area and at AD	POLE	210917.2N 0724537.5E	302 FT	NIL	Pylon Mast
In circling area and at AD	POLE	210935.0N 0724522.2E	302 FT	NIL	Pylon Mast
In circling area and at AD	POLE	210906.2N 0724417.6E	253 FT	NIL	Chimney Rod Top (ONGC)

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	POLE	210912.9N 0724416.0E	374 FT	NIL	Chimney Rod Top (ONGC)
In circling area and at AD	POLE	210931.2N 0724359.1E	246 FT	NIL	Chimney Rod Top (ONGC)
In circling area and at AD	POLE	210937.3N 0724359.3E	351 FT	NIL	Mast Disc Top (ONGC)
In circling area and at AD	POLE	210613.6N 0724145.3E	330 FT	NIL	Pylon Mast
In circling area and at AD	POLE	210936.8N 0724424.0E	359 FT	NIL	Mast Rod Top (GAIL)
In circling area and at AD	POLE	210603.0N 0724159.2E	212 FT	NIL	Pylon Mast
In circling area and at AD	POLE	210657.3N 0724614.0E	192 FT	NIL	Communication Mast
In circling area and at AD	POLE	210638.4N 0724425.3E	45 FT	NIL	DVOR Main Antenna
In circling area and at AD	POLE	210640.7N 0724427.4E	51 FT	NIL	DVOR Monitor Antenna
In circling area and at AD	POLE	210648.3N 0724438.6E	64 FT	NIL	Self-Radiating Mast
In circling area and at AD	POLE	210658.6N 0724429.7E	45 FT	NIL	W.D.I.
In circling area and at AD	POLE	210638.3N 0724425.6E	52 FT	NIL	DVOR Main Antenna

VASU AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Name of the associated meteorological office	Available in City
2	Hours of service and, where applicable, the designation of the responsible meteorological office outside these hours	AS ATS
3	Office responsible for preparation of TAFs and periods of validity and interval of issuance of the forecasts	NOT AVBL
4	Availability of the trend forecast for the aerodrome and interval of issuance	NOT AVBL
5	Information on how briefing and/or consultation is provided	NOT AVBL
6	Types of flight documentation supplied and language(s) used in flight documentation	ENGLISH
7	Charts and other information displayed or available for briefing or consultation	NOT AVBL
8	Supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;	NOT AVBL
9	The air traffic services unit(s) provided with meteorological information	METAR
10	Additional information, e.g. concerning any limitation of service.	Wind Direction Indicator Available, Lighted.

VASU 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
04	43.00 DEG	2250 x 45 M	56/F/D/X/T	THR: 210638.05N 0724417.41E
22	223.00 DEG	2250 x 45 M	56/F/D/X/T	THR: 210731.60N 0724510.60E

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: 22.0FT TDZ:	0.10%			2370 x 300 M
THR: 29.0FT TDZ:	-0.10%			2370 x 300 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
90M x 90M			NIL

VASU 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
04	2250	2250	2250	2250	
22	2250	2250	2250	2250	

VASU 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
04	SALS 420 M LIH	Green	PAPI /3.00 DEG	
22	SALS 420 M LIH	Green	PAPI /3.00 DEG	

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
	2250 M 60 M White LIH	Red		NIL
	2250 M 60 M White LIH	Red		NIL

VASU AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	Location, characteristics and hours of operation of aerodrome beacon/identification beacon (if any)	ABN	Available at ATC Tower with alternate White & Green flashes: 30 flashes per minute. As ATS
		IBN	NIL
2	Location and lighting (if any) of anemometer/landing direction indicator;	LDI	In front of ATC Control Tower near approach road to fire station
		Anemometer	Not Available
3	Taxiway edge and taxiway centre line lights;	Edge	Available
		Centre Line	Not Available
4	Secondary power supply including switch-over time;	Available Switch over Time 10 sec	
5	Remarks	NIL	

VASU 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	Not Established
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;	Not Established
4	True bearings of FATO;	Not Established
5	Declared distances available	Not Established
6	Approach and FATO lighting;	Not Established
7	Remarks	Not Established

VASU AD 2.17 AIR TRAFFIC SERVICE AIRSPACE

1	Airspace designation, geographical coordinates and lateral limits	CTR: Area bounded by lines joining points 204654N 0724136E; 205103N 0724958E; 204901N 0725433E then along the counter clockwise arc of a circle of 20NM radius centred on ARP VASU (210658N 0724431E) to point of origin.
2	Vertical limits	FL 145
3	Airspace classification	D
4	Call sign and language(s) of the air traffic services unit providing service;	Surat Tower, English
5	Transition altitude	4000 FT
6	Hours of applicability	HO
7	Remarks	NIL

VASU AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Call sign	Channel(s)	SATVOICE Number(s), if available
1	2	3	4
TWR	Surat Tower	118.550 MHZ	
ATIS	-----	127.075 MHZ	

Logon address, as appropriate	Hours of operation	Remarks
5	6	7
	As ATS	NIL
	As ATS	NIL

VASU 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 22	ISUT	109.100 MHz	AS ATS
GP 22	----	331.400 MHz	AS ATS
DME ILS 22	ISUT	CH28X	AS ATS
VOR/DME	SUR	112.200 MHz CH59X	As ATS

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
210615.3N 0724354.8E			
210720.5N 0724505.2E			Glide angle 3 DEG
210720.5N 0724505.2E			Collocated with GP
210638.3N 0724425.3E	60 FT		Restricted between Radials 155 to 175

VASU AD 2.20 LOCAL AERODROME REGULATIONS

1. Two landings and two Take-offs per day of either B737-800 or A321-200, 78.4 Ton variant type aircraft will be permitted.

VASU AD 2.21 NOISE ABATEMENT PROCEDURES

NIL

VASU AD 2.22 FLIGHT PROCEDURES

NIL

VASU AD 2.23 ADDITIONAL INFORMATION

i. Aircraft Stand Details:

Stand No.	Wingspan (M)	Length (M)	Coordinates	Strength	Remarks
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1	34 M	40 M	210710.83 N 0724435.50 E	62 R/C/W/T	Power-in Pushback
2	34 M	40 M	210712.81N 0724437.47E	62 R/C/W/T	Power-in Pushback PAX Boarding Bridge Available
3	34 M	40 M	210713.80 N 0724438.43 E	62 R/C/W/T	Power-in Pushback PAX Boarding Bridge Available
4	34 M	40 M	210715.78 N 0724440.40 E	62 R/C/W/T	

VASU AD 2.24 CHARTS RELATED TO AN AERODROME

1. Aerodrome Chart
2. Aircraft Parking/Docking Chart
3. Aerodrome Obstacle Chart Type-A, (Operating Limitations) RWY 04
4. Aerodrome Obstacle Chart Type-A, (Operating Limitations) RWY 22
5. ILS Procedure RWY 22 (CAT A/B/C)
6. VOR Procedure RWY 04 (CAT A/B/C)
7. VOR Procedure RWY 22 (CAT A/B/C)

AERODROME CHART

21°06'57.76"N
072°44'30.55"E ELEV 29

TWR 118.55

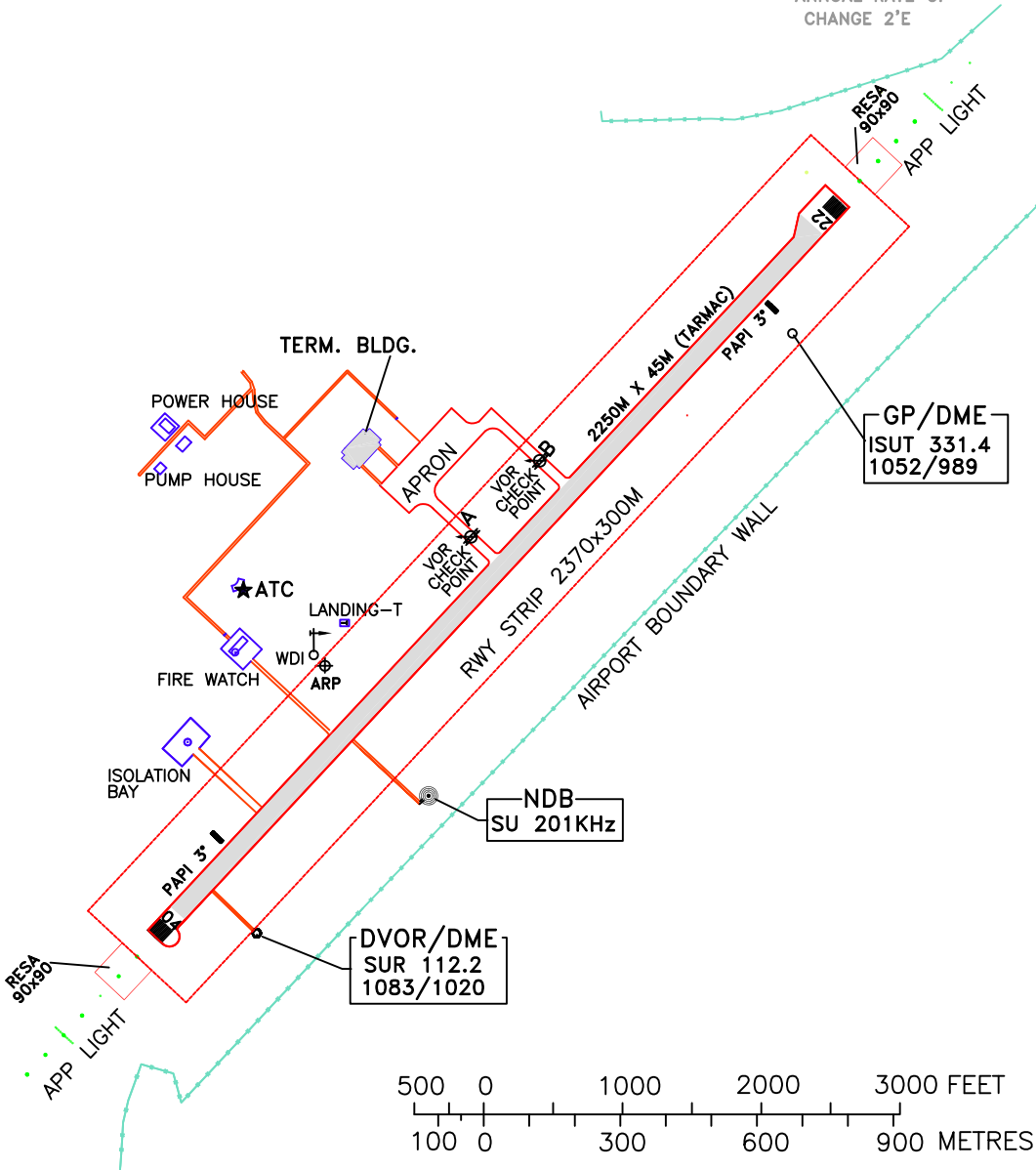
SURAT, INDIA

SURAT AIRPORT

RWY	DIRECTION	THR CO-ORDINATES	THR ELEV.	BEARING STRENGTH
04	043°	21°06'38.05"N 072°44'17.41"E	22	56/F/D/X/T
22	223°	21°07'31.60"N 072°45'10.60"E	29	

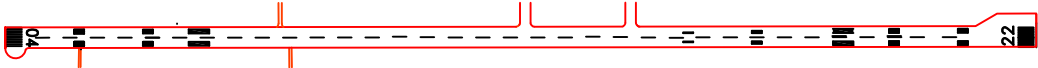
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- * BEARINGS ARE MAGNETIC
- * DIMENSIONS IN METRES
- * ELEVATIONS IN FEET
- * TAXI WAYS 23M WIDE

N(True)
N(Mag)
VAR 0°30'W(2010)
ANNUAL RATE OF
CHANGE 2'E



LOC
ISUT 109.1

MARKING AIDS RUNWAY 04/22



* AERONAUTICAL GROUND LIGHTS ARE NOT SHOWN IN THIS CHART

DATE OF AERONAUTICAL INFORMATION
JUNE 2014

AIRCRAFT PARKING/
DOCKING CHART

APRON ELEV 23

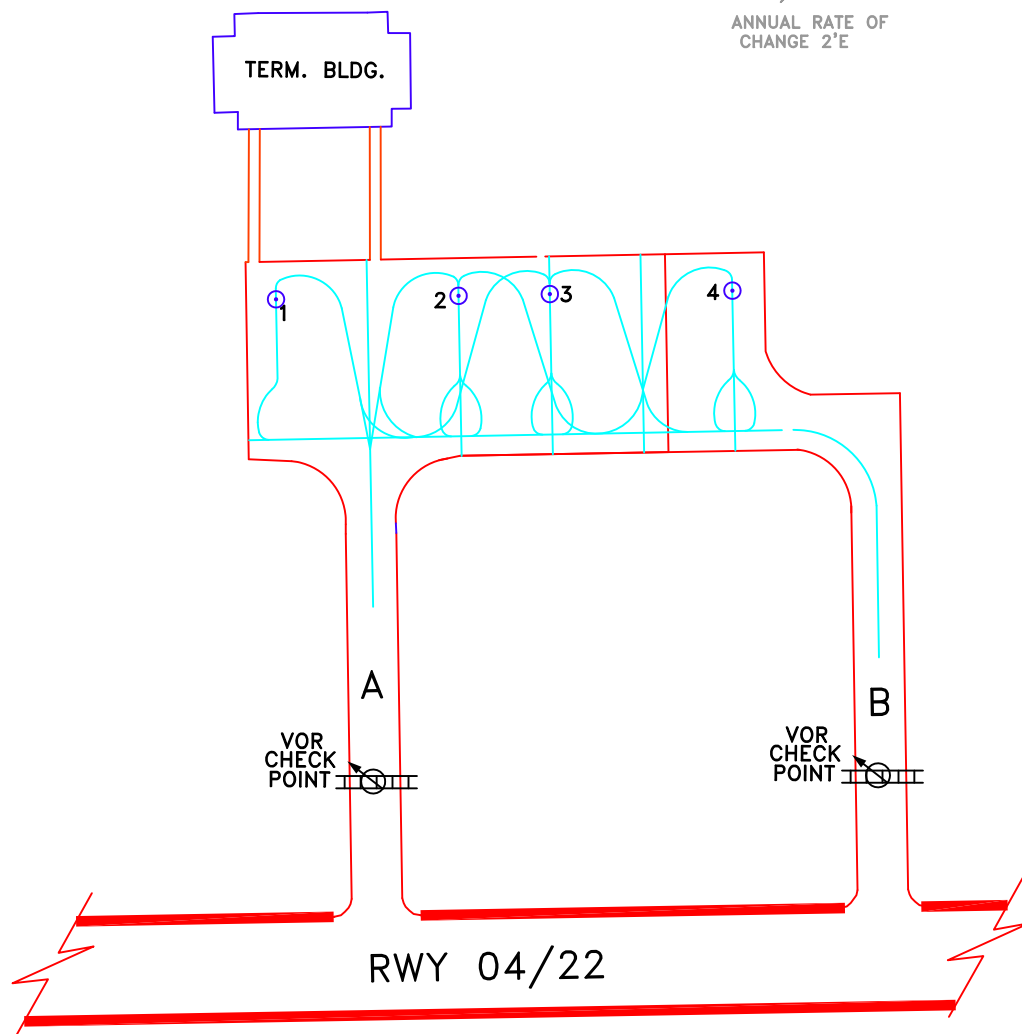
TWR 118.55

SURAT, INDIA

SURAT AIRPORT

- * DATUM : WGS-84
- * DIMENSIONS IN METRES
- * ELEVATIONS IN FEET.

N(Mag) N(True)
VAR 0°30'W(2010)
ANNUAL RATE OF
CHANGE 2'E



LEGEND	
AIRCRAFT STAND	4
TAXI-HOLDING POSITION	=====
WGS CO-ORDINATES FOR AIRCRAFT STANDS	
1. 21°07'10.83"N 072°44'35.50"E	
2. 21°07'12.81"N 072°44'37.47"E	
3. 21°07'13.80"N 072°44'38.43"E	
4. 21°07'15.78"N 072°44'40.40"E	

APRON PCN 62/R/C/W/T
TWY PCN 62/R/C/W/T
AIRCRAFT STANDS 1 TO 4 FOR B738 OR A321

* AERONAUTICAL GROUND LIGHTS ARE NOT SHOWN IN THIS CHART

DATE OF AERONAUTICAL INFORMATION
JUNE 2014

ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

AERODROME OBSTACLE CHART
TYPE -A (OPERATING LIMITATIONS)

INDIA/SURAT
SURAT AIRPORT/RWY 04

MAGNETIC VARIATION 1°W (2010)

RWY 04/22

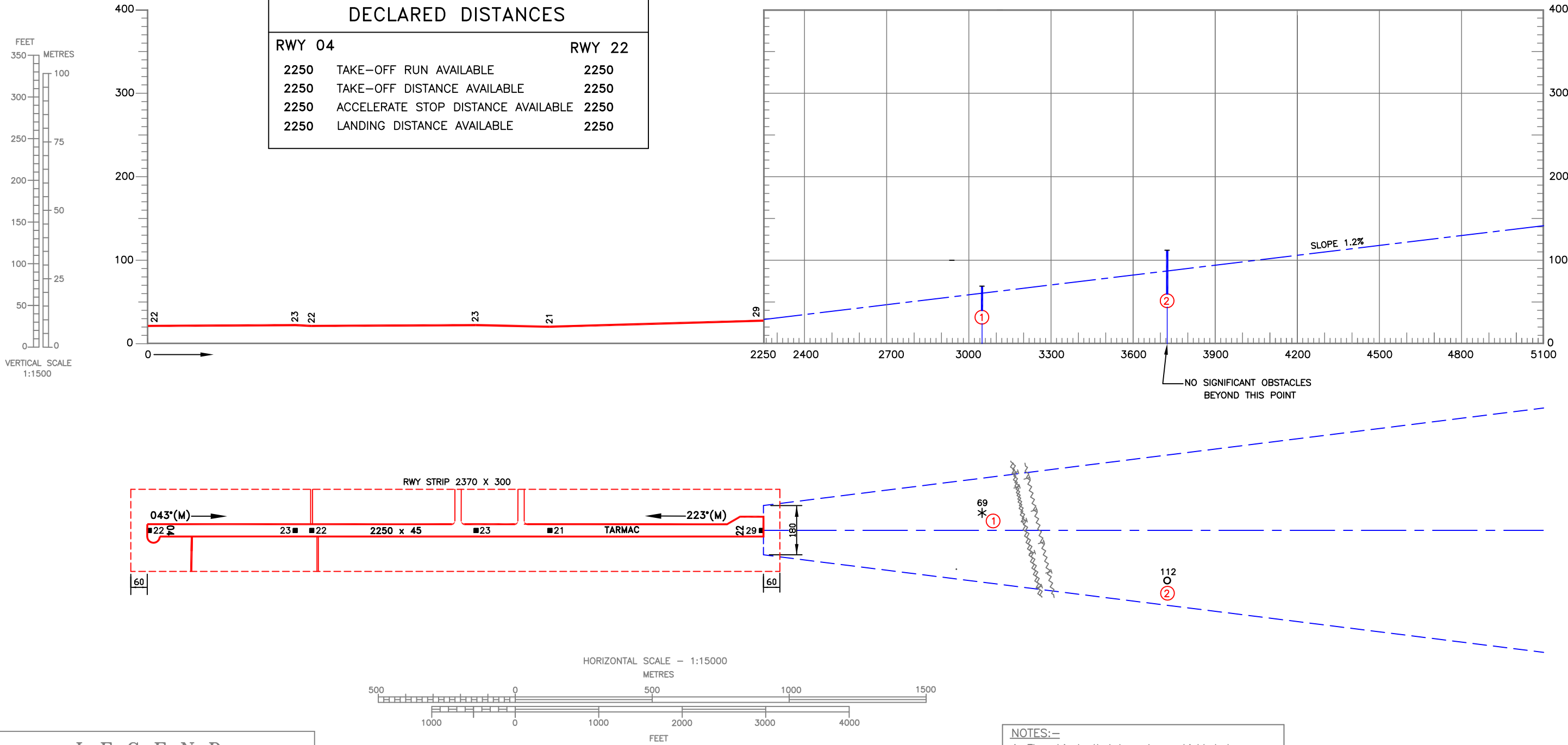
DECLARED DISTANCES

RWY 04

2250 TAKE-OFF RUN AVAILABLE
2250 TAKE-OFF DISTANCE AVAILABLE
2250 ACCELERATE STOP DISTANCE AVAILABLE
2250 LANDING DISTANCE AVAILABLE

RWY 22

2250
2250
2250
2250



LEGEND		
	PLAN	PROFILE
IDENTIFICATION NUMBER	①	
O.H.W.T.	○	
TREE OR SHRUB	*	
RWY ELEV.(SPOT)	■23	
HIGH TENSION LINE	~~~~~	

ORDER OF ACCURACY	
HORIZONTAL	— 3.0m
VERTICAL	— 1ft.

- NOTES:—
- The objects that have been shielded due to presence of other higher objects have not been shown in this chart.
 - Obstructions in the form of trees which are being cut or pruned have not been taken into consideration for establishing threshold displacement.
 - Datum — All Elevations are AMSL.
 - Periphery road without traffic is no obstacle.
 - Consult Notam for latest information.
 - Rwy directions rounded to nearest degree.(Magnetic)
(In degree minute : Rwy 04/22 = 043°23'/223°23')
(taken upto 2013)
 - All obstacles shown in this chart are based on aeronautical obstacle Survey May 2007.

AMENDMENT RECORD			
NO.	DATE	ENTERED BY	
1.	07.10.14	Rwy Strip changed.	R.S.

AERONAUTICAL INFORMATION UPTO — SEPTEMBER 2014
वैमानिक सूचना — सितंबर 2014 तक

COMPILED BY : CARTO— ACC, AIRPORTS AUTHORITY OF INDIA
संग्रहित किया : कार्टो—वै.मा.प्र., भारतीय विमानपत्तन प्राधिकरण

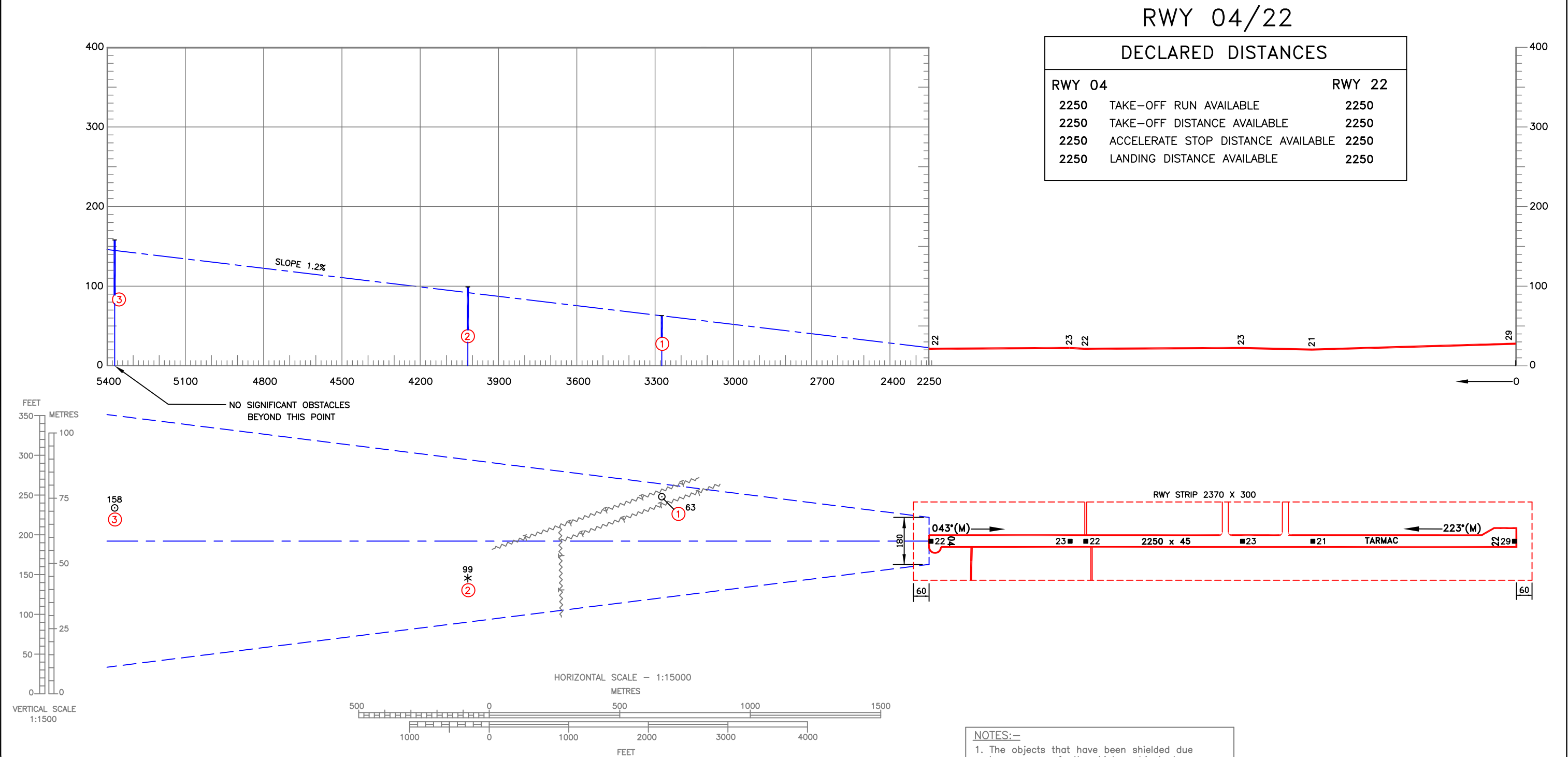
CHART No. AAI/28—OBS/CARTO—ACC/2014
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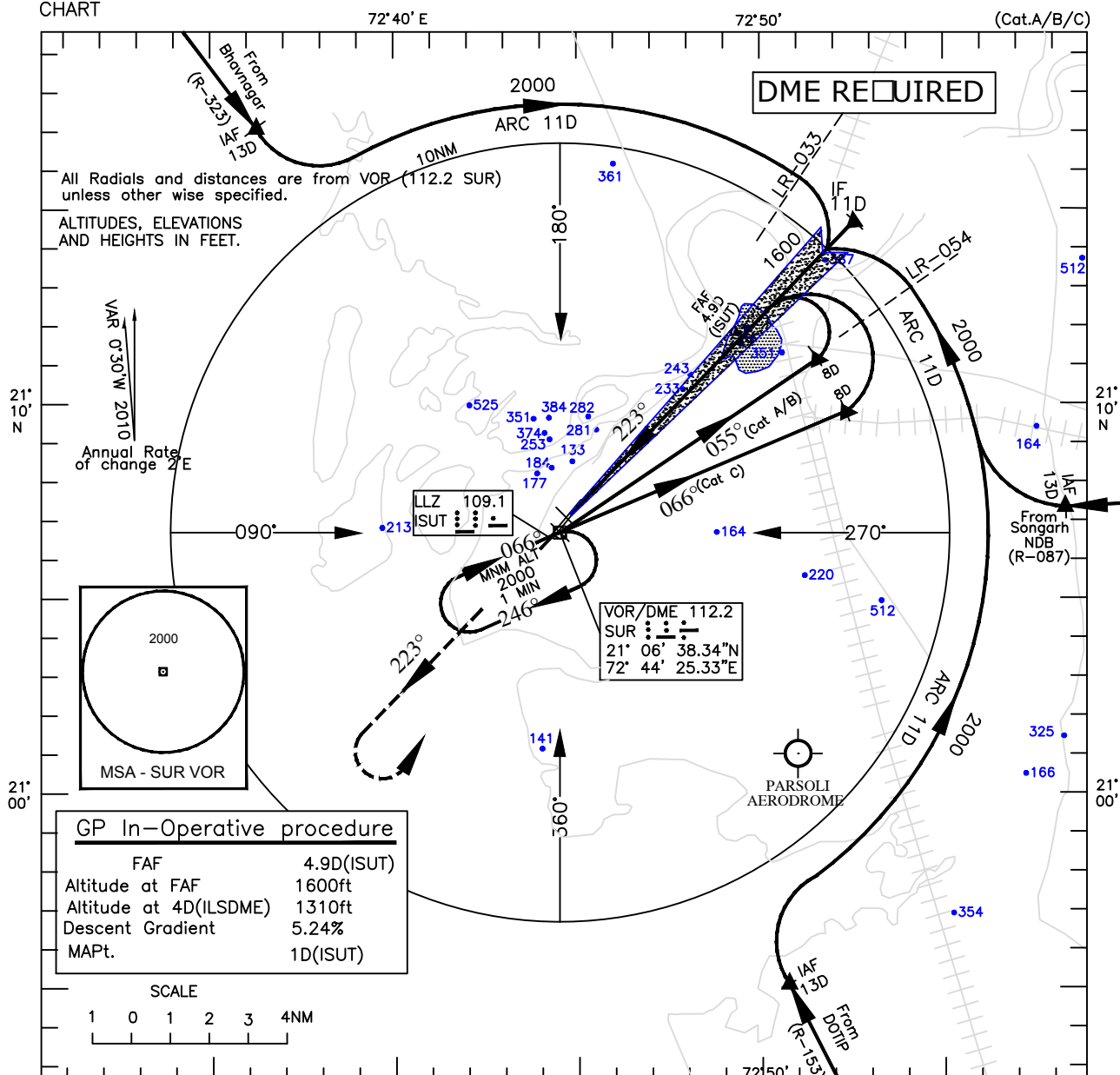
ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

AERODROME OBSTACLE CHART
TYPE -A (OPERATING LIMITATIONS)

INDIA/SURAT
SURAT AIRPORT/RWY 22

MAGNETIC VARIATION 1°W (2010)



INSTRUMENT
APPROACH
CHARTAERODROME ELEV. 29ft.
HEIGHTS RELATED TO
THR RWY 22 ELEV.29ftTWR.118.55
APP.118.55SURAT
INDIA
ILS RWY 22
(Cat.A/B/C)

Transition Alt.4000

Missed Approach

Climb straight ahead to 2000ft.,
turn LEFT to join VOR hold
or as instructed by ATC.

ILS RDH 50

Nautical miles from THR RWY 22

O C A (H)			Distance (ISUT)/Altitude information for GP in-op Procedure:				
CATEGORY OF AIRCRAFT	A/B	C	Distance(NM)	4.9D	4D	3D	2D
STRAIGHT-IN	260(231)	260(231)	Altitude (ft.)	1600	1310	990	670
CIRCLING	690(661)	920(891)	Rate of Descent /Ground speed information				
GP in-op Procedure:			Ground speed (kt.)	80	100	120	140
STRAIGHT-IN	500(471)	500(471)	Rate of descent (ft/min)	425	530	635	745
CIRCLING	690(661)	920(891)					

DRG. NO. AAI/09-IALC/07/01-05-2016

INSTRUMENT
APPROACH
CHARTHEIGHTS RELATED TO
AERODROME ELEV. 29ft.
THR RWY 04 ELEV.24ft

TWR.118.55

SURAT
INDIA
VOR RWY 04
(Cat.A/B/C)