

MINISTRY OF TOURISM & CIVIL AVIATION

New Delhi, the 15th March, 1979

G.S.R. 516.—In exercise of the powers conferred by section 9A of the Aircraft Act, 1934 (22 of 1934), the Central Government, being of opinion that it is necessary and expedient so to do for the safety of aircraft operations, hereby direct that—

(i) no building or structure shall be constructed or erected, or no tree shall be planted, on any land within the limits specified in Annexure I to this notification in respect of the aerodromes listed in Annexure III to this notification and where there is any building, structure or tree on such land, the owner or the person having control of such building, structure or tree shall demolish such building or structure or, as the case may be, cut such trees forthwith but not later than a period of one month from the date of publication of this notification in the Official Gazette ;

(ii) no building or structure higher than the height specified in Annexure II to the notification shall be constructed or erected or no tree which is likely to grow or ordinarily grows higher than the height specified in the said Annexure II, shall be planted, on any land within a radius of twenty kilometres from the aerodrome reference point (ARP) of the aerodromes listed in Annexure III to this notification excluding the land covered by Annexure I to this notification and where the height of any building or structure or tree on such land is higher than the height specified in the said Annexure II, the owner or the person having control of such building, structure, or tree shall forthwith but not later than a period of one month from the date of publication of this notification in the Official Gazette, reduce the height thereof so as not to exceed the specified height.

ANNEXURE I

The land enclosed in approach funnels of the runway with a maximum distance of 360 metres, measured from each runway and along extended centre line of the runway.

Note 1. In this Annexure, "approach funnel" in the case of an instrument runway means the area in the shape of an isosceles trapezium having the longer parallel side 4800 metres long (2400 metres on either side of the extended centre-line of the runway) and smaller parallel side 300 metres long (150 metres on either side of the extended centre-line of the runway) where the smaller and longer parallel sides are placed at a distance of 60 metres and 15060 metres, respectively, from the end of the runway and at right angles to the extended centre-line.

Note 2. In the case of a non-instrument runway, the approach funnel means the area in the shape of an isosceles trapezium having the longer parallel side 1800 metres long (900 metres on either side of the extended centre-line of the runway) and smaller parallel side 180 metres long (90 metres on either side of the extended centre-line of the runway), where the smaller and longer parallel sides are placed at a distance of 60 metres and 6540 metres, respectively, from the end of the runway and at right angles to the extended centre-line. Thereafter, the trapezium is followed by a contiguous rectangular area of that width for the remainder of the length upto a distance of 15060 metres from the end of runway.

Note 3. An instrument runway is a runway served by visual and non-visual aid or aids providing atleast directional guidance adequate for a straight-in-approach and intended for the operation of aircraft using instrument approach procedures.

ANNEXURE II

(a) The land enclosed in the "approach funnels" of all runways where distances are measured from each end of the runway, along extended centre-line of the runway.

Area	Maximum permissible height above the elevation of nearest runway end.
(i) More than 360 metres but not exceeding 510 metres	6 metres
(ii) More than 510 metres but not exceeding 660 metres	9 metres

(iii) More than 660 metres but not exceeding 810 metres	12 metres
(iv) More than 810 metres but not exceeding 960 metres	15 metres
(v) More than 960 metres but not exceeding 1110 metres	18 metres.
(vi) More than 1110 metres but not exceeding 1260 metres	21 metres
(vii) More than 1260 metres but not exceeding 1410 metres	24 metres
(viii) More than 1410 metres but not exceeding 1560 metres	27 metres
(ix) More than 1560 metres	30 metres

(b) The land enclosed in the "transitional area" of all runways at an aerodrome listed in the Annexure III of this notification where distances are measured from the associated runway strip and the edge of the associated "approach funnels", forming the inner boundary of the "transitional area" and along a line at right angles to the centre-line of the runway.

Distance from the inner boundary of the "transitional area" specified above	Maximum permissible height above the elevation of the ARP
(i) Upto a distance of 21 metres	Nil
(ii) More than 21 metres but not exceeding 42 metres	3 metres
(iii) More than 42 metres but not exceeding 63 metres	6 metres
(iv) More than 63 metres but not exceeding 84 metres	9 metres
(v) More than 84 metres but not exceeding 105 metres	12 metres
(vi) More than 105 metres but not exceeding 126 metres	15 metres
(vii) More than 126 metres but not exceeding 147 metres	8 metres
(viii) More than 147 metres but not exceeding 168 metres	21 metres
(ix) More than 168 metres but not exceeding 189 metres	24 metres
(x) More than 189 metres but not exceeding 210 metres	27 metres
(xi) More than 210 metres	30 metres

Note 1.—The "transitional area" is an area which is below a specified surface sloping upwards and outwards from the edge of the approach funnel and from a line originating at the end of the inner edge of each approach area, drawn parallel to the runway centre-line in the direction of landing.

Note 2.—"Aerodrome reference point" is a designated point, which is established in the horizontal plane at or near the geometric centre of the landing area.

Note 3.—“Elevation” or a “Reduced Level” is the vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level.

Note 4.—For a description of “approach funnel” “runway strip” and “transitional area”, see diagram in Annexure IV to this notification.

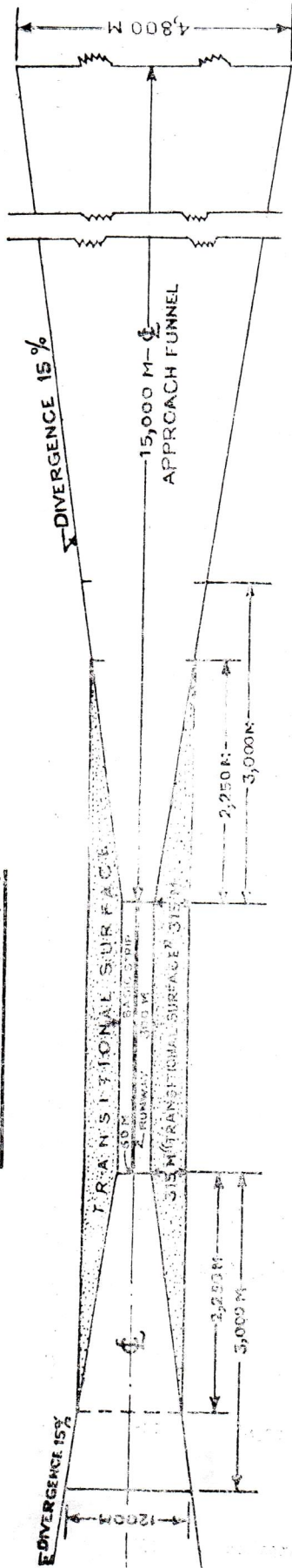
ANNEXURE III

List of aerodromes, indicating runway directions, runway end elevations and ARP elevations.

Sl. No.	Aerodrome	ARP Elevation (metres)	Runway No.	Runway End (Elevation (metres))	Remarks
1	2	3	4	5	6
1.	Ahmedabad	55	14	54	
			32	56	
			05	54	
			23	56	
2.	Agartala	14	05	12	
			23	14.5	
			18	13.5	
			36	13.5	
3.	Akola	305	10	303	
			28	304	
4.	Amritsar	229	07	229	
			25	230	
			16	230	
			34	229	
5.	Aurangabad	581	09	582	
			27	573.5	
6.	Belgaum	758	08	755	
			26	747	
7.	Balurghat	24	09	24	
			27	23.5	
8.	Bangalore	888	09R	875	
			27L	881	
			09L	876	
			27R	882.5	
9.	Baroda	37	04	36.5	
			22	38.5	
			09	36.5	
			27	36.5	
10.	Behala	2.6	18	3.0	
			36	3.5	
11.	Bhavnagar	5.4	07	11	
			25	6	
12.	Bhopal	523	06	523.5	
			24	521	
			12	521.5	
			30	523	
13.	Bhubaneswar	45	05	33	
			23	41.5	
			14	38	
			32	37	
14.	Bhuj	78.5	05	81.5	
			23	74.5	
			11	79	
			29	77.5	
		274	06	270	
			24	282	
			17	276	
			35	269	
16.	Bombay (Juhu)				3
					08
					26
					2.5
					04
					2.5
					22
					2.5
					16
					2.5
					34
					2.5
17.	Bombay (Santacruz)				8
					09
					27
					4
					14
					11
					32
					7.5
					05
					4
					23
					9
18.	Calcutta				5.3
					01L
					4.8
					19R
					5
					01R
					5
					19L
					5
					07
					4
					25
					4
19.	Chakulia				129
					08
					135
					26
					132
					17
					130
					35
					127
20.	Coimbatore				396
					05
					402
					23
					391
21.	Cooch-Behar				41.5
					04
					41.5
					22
					41.5
22.	Delhi (Palam)				227
					10
					219
					28
					236.5
					09
					220
					27
					229
					15
					224
					33
					232
23.	Delhi (Safdarjung)				212
					12
					215
					30
					212
24.	Dibrugarh				109.5
					05
					109
					23
					109.5
25.	Gauhati				48
					03
					49
					21
					48
26.	Gaya				110
					10
					108
					28
					115.5
					01
					109
					19
					111
27.	Hyderabad				531
					09
					530
					27
					522
					14
					531
					32
					528
28.	Indore				561
					07
					563.5
					25
					559.5
29.	Jabalpur				495
					06
					480.8
					24
					494.5
					18
					492
					36
					493
30.	Jaipur				385
					15
					389.5
					33
					384.4
					09
					383.7
					27
					381.3
31.	Jhansi				236
					15
					236.5
					33
					236.5
32.	Jharsuguda				228
					06
					228.20
					24
					229.14
33.	Kailashahar				27.5
					03
					28.5
					21
					27.5

1	2	3	4	5	6	1	2	3	4	5	6
34. Kamalpur .		39	01 19	45 41		54. Passighat .		155.5	17 35	156.5 153	
35. Kandla		29	05 23	29 29		55. Patna . .		51	07 25	52 52	
36. Kanpur .		125	10 28	125 124.5		56. Pantnagar .		233	10 28	234 234	
37. Keshod .		49.5	05 23 18 36	50.5 50.5 50 52.5		57. Porbandar		5	09 27	6.7 4.5	
38. Khajuraho .		216	01 19	222 209		58. Port Blair .		6	04 22	3.66 17.8	
39. Kolhapur .		607	07 25	609.6 605.6		59. Raipur .		313.6	06 24	309 316	
40. Kota . .		273	08 26	272 272.5		60. Rajahmundry		45	05 23	34 46	
41. Kulu . .		1084	16 34	1089 1088		61. Rajkot		134	05 23 14 32	133 128.5 130 133.5	
42. Khowai .		29	18 36	26 27		62. Ranchi .		646	13 31	654 632.5	
43. Lalitpur .		367	10 28	368.5 363		63. Satna .		319	11 29	316.5 316	
44. Lilabari .		100.2	04 22	101.5 101.5		64. Sholapur .		481	15 33	478.5 478	
45. Lucknow .		122	09 27 01 19	122 122 122 123		65. Silchar . .		102	06 24	98.5 107.5	
46. Madras .		10.5	07 25 12 30	12 15.5 9 13		66. Tiruchirapalli		85	15 33 09 27	84 85 88 84	
47. Madurai .		136.30	09 27 13 31	140 130 138.5 136		67. Tanjore		76	14 32 07 25	77 70.5 76.5 74.5	
48. Malda .		24	11 29	24 23.5		68. Tirupati .		103	08 26	105.5 101.2	
49. Muzaffarpur .		53	11 29	53 53		69. Tulihal (Imphal)		774.5	04 22	773.5 775	
50. Mysore .		713	05 23 09 27	720 710 717.5 708		70. Udaipur .		509	08 26	511.5 508	
51. Nagpur .		308.5	09 27 14 32	309 301 315 307		71. Varanasi .		80	09 27	80 80	
52. Panagarh .		73	15 33	71 73		72. Vijayawada .		21	08 26	25 21.5	
53. Panna . .		425	17 35	435.80 410.35		73. Visakhapatnam		3	05 23 09 27 18 36	4 2.5 4 2.5 4 4	
						74. Warangal .		285	15 33 09 27	290 276.5 289 280.5	
						75. Mangalore .		102	09 27	89 97	

INSTRUMENT RUNWAY



NON-INSTRUMENT RUNWAY

