

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
W10 [North Bound] (MUMBAI - DELHI)						
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E	004 100NM	F460/F075 3800Ft Class D	20NM	↓		1. Mumbai ACC 125.35MHz, 132.7MHz 120.5MHz 2. Ahmedabad ACC 132.5MHz, 134.2MHz 3. Outside CTA, CTR Classe 'E' airspace. 4. Nagpur ACC 123.9MHz 122.7MHz, 133.65MHz 5. Aircraft shall report to Agra TWR on 122.3MHz when Abeam Agra VOR (AGG). 6. Aircraft shall report position 2630N 07800E to Gwalior TWR on 123.5MHz 7. Delhi ACC 120.9MHz, 124.2MHz
▲ DOTIP 204528.7N 0725646.7E	004 50NM					
▲ APANO 213502.4N 0725857.7E	049 92NM	F460/F075 3100Ft Class D				
▲ BODAR 223619.1N 0741317.1E	086 88NM	F460/F075 3500Ft Class D				
▲ INDORE VOR (IID) 224322.1N 0754824.3E	068 91NM	F460/F075 5900Ft Class D				
▲ BHOPAL VOR (BPL) 231657.9N 0772009.6E	016 107NM	F460/F075 3600Ft Class E				
▲ BILAN 250001.4N 0775026.3E	016 80NM					
▲ GWALIOR VOR (GWA) 261747.1N 0781336.5E	328 65NM	F460/F075 3400Ft Class E				
▲ POSIG 271300.6N 0773455.3E	342 20NM	F460/F075 3100Ft Class E				
▲ LETPU 273220.5N 0772800.3E	342 65NM	F460/F075 3000Ft Class D				
▲ DELHI VOR (DPN) 283400.2N 0770542.1E						
W10 [South Bound] (DELHI - MUMBAI)						
▲ DELHI VOR (DPN) 283400.2N 0770541.5E	143 55NM	F460/F075 3400Ft Class D	20NM	↓		1. Aircraft shall report position to Agra TWR on 122.3MHz when Abeam Agra VOR (AGG).
▲ ITBAN 274943.4N 0774247.5E	144 7NM	F460/F075 3400Ft Class D				

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				Odd	Even	
▲ GURTI 274345.5N 0774740.2E	165 36NM	F460/F075 5000Ft Class D	20NM	↓		<p>2. Aircraft shall report position 2630N 07800E to Gwalior TWR on 123.5MHz</p> <p>3. Outside CTA, CTR Class 'E' airspace.</p> <p>4. Delhi ACC 120.9MHz, 124.2MHz</p> <p>5. Nagpur ACC 123.9MHz 122.7MHz, 133.65MHz</p> <p>6. Ahmedabad ACC 123.75MHz, 134.2MHz</p> <p>7. Mumbai ACC 125.35MHz, 132.7MHz 120.5MHz</p>
▲ AGRA VOR (AGG) 270900.7N 0775755.1E	165 53NM	F460/F075 3400Ft Class D				
▲ GWALIOR VOR (GWA) 261747.1N 0781336.5E	196 80NM	F460/F075 3600Ft Class D				
▲ BILAN 250001.4N 0775026.3E	196 107NM	F460/F075 3600Ft Class D				
▲ BHOPAL VOR (BPL) 231657.9N 0772009.1E	248 91NM	F460/F075 4000Ft Class D				
▲ INDORE VOR (IID) 224322.1N 0754824.3E	235 156NM	F460/F075 5900Ft Class D				
▲ SONGARH NDB (SG) 211002.5N 0733357.4E	199 58NM	F460/F075 3800Ft Class D				
▲ AKTIV 201502.8N 0731457.6E	199 73NM					
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E						
W12 [North Bound] (MUMBAI - VADODARA)						
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E	004 150NM	F460/F075 3800Ft Class D	20NM			<p>1. Mumbai ACC 125.35MHz, 132.7MHz 120.5MHz</p> <p>2. Ahmedabad ACC 132.5MHz, 134.2MHz</p> <p>3. Suitably equipped aircraft are required to squawk mode 3A and the assigned code and Mode C.</p> <p>4. Aircraft not assigned any code shall squawk mode 3A and code 2000 and Mode C.</p>
▲ APANO 213502.4N 0725857.7E	018 47NM	F460/F075 2300Ft Class D				
▲ VADODARA VOR (QQZ) 221958.2N 0731330.5E						
W12 [South Bound] (VADODARA - MUMBAI)						
▲ VADODARA VOR (QQZ) 221958.2N 0731330.5E	166 73NM	F460/F075 3100Ft Class D	20NM			<p>1. Ahmedabad ACC 132.5MHz, 134.2MHz</p>

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				Odd	Even	
▲ SONGARH NDB (SG) 211002.5N 0733357.4E	199 58NM	F460/F075 3800Ft Class D	20NM			
▲ AKTIV 201453.3N 0731529.5	199 73NM	F460/F075 3800Ft Class D	20NM			2. Mumbai ACC 125.35MHz, 132.7MHz 120.5MHz
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E						
W13 [North Bound] (MUMBAI - DELHI)						
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E	004 150NM	F460/F075 3800Ft Class D	20NM	↓	↓	<p>1. Minimum 10 Min. longitudinal separation applicable.</p> <p>2. Mumbai ACC 125.35MHz, 132.7MHz 120.5MHz</p> <p>3. Ahmedabad ACC 123.75MHz, 134.2MHz</p> <p>4. Route between Ahmedabad VOR (AAE) and Delhi VOR (DPN) is available as contingency route for international flights.</p> <p>5. Suitably equipped aircraft are required to squawk mode 3A and the assigned code and Mode C.</p> <p>6. Aircraft not assigned any code shall squawk mode 3A and code 2000 and Mode C.</p> <p>7. Delhi ACC 124.55MHz, 124.2MHz</p> <p>8. Flights landing at Jaipur may use W13S after Udaipur VOR (UUD).</p>
▲ APANO 213502.4N 0725857.7E	348 91NM	F460/F075 1800Ft Class D				
▲ AHMEDABAD VOR (AAE) 230405.4N 0723744.8E	037 116NM	F460/F075 5000Ft Class D				
▲ UDAIPUR VOR (UUD) 243646.4N 0735338.7E	030 210NM	F460/F075 4800Ft Class D				
▲ DIPAS 273815.4N 0755151.1E	044 60NM	F460/F075 4300Ft Class D				
▲ CHILLERKI VOR (CHI) 282100.2N 0763931.7E	060 26NM	F460/F075 3000Ft Class D				
▲ DELHI VOR (DPN) 283400.2N 0770542.1E						
W13 [South Bound] (DELHI - MUMBAI)						
▲ DELHI VOR (DPN) 283400.2N 0770542.1E	213 55NM	F460/F075 3200Ft Class D	20NM			<p>1. Delhi ACC 124.55MHz, 124.2MHz</p> <p>2. Route between Ahmedabad VOR (AAE) and Delhi VOR (DPN) is available as contingency route for international operators.</p>
▲ REBON 274800.7N 0763120.6E	214 20NM	F460/F075 4100Ft Class D				

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▲ IKABA 273123.4N 0761850.3E	213 50NM	F460/F100 4100Ft Class D	20NM			3. Minimum 10 Min. longitudinal separation applicable.
▲ JAIPUR VOR (JJP) 264930.7N 0754801.2E	199 54NM	F460/F075 4100Ft Class D	20NM		↓	4. Suitably equipped aircraft are required to squawk mode 3A and the assigned code and Mode C. 5. Aircraft not assigned any code shall squawk mode 3A and code 2000 and Mode C. 6. Ahmedabad ACC 123.75MHz, 134.2MHz 7. Mumbai ACC 132.7MHz 120.5MHz, 125.35MHz 8. Segment between Udaipur VOR (UUD) and Jaipur VOR (JJP) is available for North Bound flights landing at Jaipur
▲ GUDUM 255800.7N 0752820.7E	199 5NM	F460/F075 3000Ft Class D				
▲ NIKOT 255252.3N 0752623.7E	228 113 NM	F460/F075 4200Ft Class D				
▲ UDAIPUR VOR (UUD) 243646.4N 0735338.7E	218 116NM	F460/F075 5000Ft Class D				
▲ AHMEDABAD VOR (AAE) 230405.4N 0723744.8E	198 83NM	F460/F075 2500Ft Class D				
▲ BHAVNAGAR VOR (BVR) 214508.3N 0721126.1E	167 64NM	F460/F075 3700Ft Class D				
▲ BOFIN 204244.7N 0722732.0E	168 100NM					
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E						
W14 (MUMBAI - KESHOD - PORBANDAR)						
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E	314/134 100NM	F460/F075 1800Ft Class D	20NM		↑	↓
▲ EXOLU 201249.8N 0713410.4E	314/133 99NM					
▲ TAXUN 211906.5N 0701542.0E	301/121 39NM	F460/F075 2600Ft Class E				
▲ PORBANDAR NDB (PR) 213916.3N 0693939.3E		F460/F075 2600Ft Class E				
W15 [North Bound] (THIRUVANANTHAPURAM - MUMBAI)						

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▲ THIRUVANANTHAPURAM VOR (TVM) 082829.3N 0765529.0E	345 106NM	F460/F110 3500Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. ATS route available for use by international flights 3. Trivandrum ACC 125.95MHz, 120.9MHz
▲ COCHIN INTERNATIONAL VOR (CIA) 100901.8N 0762221.3E	340 64NM	F460/F110 3800Ft Class D				
▲ CALICUT VOR (CLC) 110805.5N 0755722.4E	333 125NM	F460/F075 6100Ft Class D	20NM		↓	4. Lower limit between Mangalore VOR (MML) and MABTA is FL220 except for flights terminating or originating at Goa, Dabolim (VAGO). 5. Mangalore ACC 127.55MHz ,128.7MHZ 6. Mumbai ACC 125.35MHz, 120.5MHz
▲ MANGALORE VOR (MML) 125740.6N 0745517.9E	338 84NM	F460/F075 3100Ft Class D				
▲ ALDIN 141422.8N 0742003.2E	338 50NM	F460/F220 4800Ft Class D				
▲ GUPOL (VOMF/VABF FIR) 150004.4N 0735904.3E	338 25NM	F460/F220 2100Ft Class D				
▲ GOA VOR (GGO) 152247.3N 0734845.4E	333 83NM	F460/F220 2100Ft Class D				
▲ OKILA 163533.9N 0730627.7E	333 34NM	F460/F220 2100Ft Class D				
▲ KABSO 170514.8N 0724909.8E	003 120NM	F460/F220 2900Ft Class D				
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E						
W15 [South Bound] (MUMBAI - THIRUVANANTHAPURAM)						
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E	168 120NM	F460/F220 4800Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. ATS route available for use by international flights. 3. Lower limit between KABSO and Mangalore VOR (MML) is FL220 except for flights terminating or originating at Goa, Dabolim (VAGO). 4...Mangalore ACC 127.55MHz, 128.7MHz 5. Mumbai ACC 125.35MHz, 120.5MHz
▲ MABTA 170828.8N 0732145.6E	168 48NM					
▲ UDULO 162204.0N 0733342.5E	168 61NM					
▲ GOA VOR (GGO) 152247.3N 0734845.4E	158 25NM	F460/F220 4800Ft Class D			↓	

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				Odd	Even	
▲ GUPOL (VABF/VOMF FIR) 150004.4N 0735904.3E	158 50NM	F460/F220 4800Ft Class D	20NM	↓		6. Trivandrum ACC 125.95MHz, 120.9MHz
▲ ALDIN 141422.8N 0742003.2E	158 84NM	F460/F075 6100Ft Class D				
▲ MANGALORE VOR (MML) 125740.6N 0745517.9E	153 125NM	F460/F075 6100Ft Class D				
▲ CALICUT VOR (CLC) 110805.5N 0755717.5N	160 64NM	F460/F075 3800Ft Class D				
▲ COCHIN INTERNATIONAL VOR (CIA) 100901.8N 0762221.3E	165 106NM	F460/F110 3500Ft Class D				
▲ THIRUVANANTHAPURAM VOR (TVM) 082829.3N 0765529.0E						
W16 [North Bound] (MUMBAI - RAJKOT)						
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E	004 100NM	F460/F075 3800Ft Class D	20NM	↓		1. Outside CTA, CTR, Class 'E' airspace. 2. Mumbai ACC 132.7MHz, 120.5Mhz
▲ DOTIP 204528.7N 0725646.7E	003 49NM					
▲ APANO 213502.4N 0725857.7E	283 45NM	F460/F075 2500Ft Class D				
▲ BHAVNAGAR VOR (BVR) 214508.3N 0721126.1E	295 86NM	F460/F075 2700Ft Class D				
▲ RAJKOT VOR (RKT) 221847.1N 0704641.7E						
W16 [South Bound] (RAJKOT - MUMBAI)						
▲ RAJKOT VOR (RKT) 221847.1N 0704641.7E	115 86NM	F460/F075 2700Ft Class D	20NM	↓		1. Outside CTA, CTR, Class 'E' airspace. 2. Mumbai ACC 132.7MHz, 120.5Mhz
▲ BHAVNAGAR VOR (BVR) 214507.3N 0721126.1E	167 64NM	F460/F075 3700Ft Class D				

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▲ BOFIN 204244.7N 0722732.0E	168 100NM	F460/F075 3700Ft Class D	20NM			
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E		F460/F075 3700Ft Class D				
W17 [North Bound] (MANGALORE - MUMBAI)						
▲ MANGALORE VOR (MML) 125740.6N 0745517.9E	357 92NM	F460/F080 5000Ft Class D	20NM			1. Minimum 10 Min. longitudinal separation applicable. 2. ATS route available for use by international flights. ↓ ↓ 3. Outside CTA, CTR, Class 'E' airspace. 4. Mumbai ACC 132.7MHz, 120.5Mhz ↓
▲ IKATI 142904.6N 0744557.0E	356 83NM					
▲ BELGAUM VOR (BBM) 155122.2N 0743701.0E	299 68NM					
▲ UDULO 162204.0N 0733342.5E	299 29NM					
▲ OKILA 163533.9N 0730627.7E	333 34NM					
▲ KABSO 170514.8N 0724909.8E	003 120NM					
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E		F460/F120 2900Ft Class D				
W17 [South Bound] (MUMBAI - MANGALORE)						
▲ MUMBAI VOR (BBB) 190507.4.6N 0725231.3E	168 120NM	F460/F200 4800Ft Class D	20NM			1. Minimum 10 Min. longitudinal separation applicable. 2. ATS route available for use by international flights. 3. Outside CTA, CTR, Class 'E' airspace. 4. Mumbai ACC 132.7MHz, 120.5Mhz 5. Mangalore ACC 127.55MHz, 128.7MHz.
▲ MABTA 170828.8N 0732145.6E	139 106NM					
▲ BELGAUM VOR (BBM) 155122.2N 0743701.0E	176 83NM					
▲ IKATI 142904.6N 0744557.0E	177 92NM	F460/F080 5000Ft Class D				

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▲ MANGALORE VOR (MML) 125740.6N 0745517.9E		F460/F080 5000Ft Class D	20NM	↓		
W18 (HYDERABAD-MUMBAI)						
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E	275 92NM	F460/F250 3900Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA, CTR, Class 'E' airspace. 3. Mumbai ACC 132.7MHz, 120.5Mhz 4. Hyderabad ACC 128.35MHz, 120.95MHz.
▲ GULBARGA VOR (GGB) 171848.8N 0764811.0E	334 46NM					
▲ APUSU (VABF/VOMF FIR) 180003.6N 0762544.1E	333 102NM					
▲ MELAX 192955.1N 0753756.5E	277 60NM	F460/F250 3600Ft	20NM		↓	
▲ OPAKA 193621.0N 0743258.0E	253 100NM	F460/F250 6200Ft			↓	
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E					↓	
W19 (BHOPAL - HYDERABAD)						
▲ BHOPAL VOR (BPL) 231657.9N 0772009.1E	179/359 62NM	F460/F250 5200Ft Class D	20NM		↓	↑
▲ IKIKO 221517.3N 0772155.6E	180/360 39NM	F460/F250 5200Ft Class D				
▲ DULAR 213628.5N 0772255.6E	179/359 64NM					
▲ NINAT 203247.8N 0772455.6E	179/359 93NM					
▲ GUMIT 185931.3N 0772801.6E	180/360 65NM					
▲ BIDAR NDB (BR) 175503.6N 0772955.6E	149/329 41NM	F460/F250 3900Ft Class D				

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				Odd	Even	
▲ VIKARABAD NDB (VB) 172003.8N 0775255.5E	104/284 31NM	F460/F125 3600Ft Class D	20NM			
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E						
W20 [North Bound] (CHENNAI - DELHI)						
▲ CHENNAI VOR (MMV) 125936.1N 0801014.5E	342 127NM	F460/F200 4100Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA, CTR, Class 'E' airspace. 3. Chennai ACC 118.9MHz, 125.3MHz 4. Hyderabad ACC 128.35MHz, 120.95MHz. 5. Nagpur ACC 123.9MHz, 122.7MHz, 133.65Mhz 6. When VID139 is active, aircraft to route via OSRAM - 3380/24NM - SAKRAS VOR (SKA) - 0080/44NM - DELHI VOR (DPN) 7. Delhi ACC 120.9MHz, 12.2MHz
▲ BODEL 145830.5N 0792511.8E	342 159NM	F460/F200 4600Ft Class D			↓	
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E	355 122NM	F460/F250 3900Ft Class D			↓	
▲ BUSBO 191458.2N 0780730.3E	351 88NM				↓	
▲ TAMID 204117.8N 0775055.4E	351 50NM	F460/F250 3800Ft Class D			↓	
▲ UPTAR 213041.5N 0774055.4E	351 37NM				↓	
▲ BIGIL 220702.3N 0773355.5E	351 71NM	F460/F250 3800Ft Class D			↓	
▲ BHOPAL VOR (BPL) 231657.9N 0772009.1E	358 85NM	F460/F250 3700Ft Class D			↓	
▲ PUKES 244202.2N 0771612.2E	358 18NM				↓	
▲ BUKLO 250001.4N 0771525.5E	358 69NM	F460/F075 3700Ft Class D			↓	
▲ BAVOX (VIDF/VABF FIR) 260831.0N 0771255.5E	358 81NM				↓	
▲ OSRAM 272900.5N 0770845.5E	357 10NM				↓	

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▲ SAPLO 273854.1N 0770815.1E	357 55NM	F460/F075 3700Ft Class D	20NM			
▲ DELHI VOR (DPN) 283400.2N 0770541.5E						
W20 [South Bound] (DELHI - CHENNAI)						
▲ DELHI VOR (DPN) 283400.2N 0770541.5E	193 71NM	F460/F075 3600Ft Class D	20NM	↓		<p>1. Route segment DELHI VOR (DPN) - KALNA may be treated as Eastbound. 2. Aircraft to contact Agra TWR on 122.3MHz when Abeam Agra VOR (AGG) for traffic information. 3. Aircraft to contact Gwalior TWR on 123.5MHz when Abeam Gwalior NDB (GJ) for traffic information. 4. Minimum 10 Min. longitudinal separation applicable. 5. Outside CTA, CTR, Class 'E' airspace. 6. Delhi ACC 120.9MHz, 12.2MHz</p>
▲ AKELA 272500.5N 0764755.7E	193 59NM			↓		
▲ INTIL 262750.9N 0763240.8E	193 34NM			↓		
▲ KALNA 255417.1N 0762355.9E	162 57NM			↓		
▲ IBANI (VIDF/VABF FIR) 250001.4N 0764310.8E	162 108NM	F460/F250 3600Ft Class D	20NM	↓		
▲ BHOPAL VOR (BPL) 231657.9N 0772009.1E	170 71NM	F460/F250 3600Ft Class D		↓		
▲ BIGIL 220702.3N 0773355.5E	171 37NM			↓		
▲ UPTAR 213041.5N 0774055.4E	171 50NM			↓		
▲ TAMID 204117.8N 0775055.8E	171 88NM	F460/F250 3900Ft Class D		↓		
▲ BUSBO 191458.2N 0780730.3E	174 122NM			↓		
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E	158 147NM	F460/F100 4600Ft Class D		↓		
▲ BODEL 145830.5N 0792511.8E	161 127NM	F460/F100 4100Ft Class D		↓		
						<p>7. Nagpur ACC 123.9MHz, 122.7MHz, 133.65Mhz 8. Hyderabad ACC 128.35MHz, 120.95MHz. 9. Chennai ACC 118.9MHz, 125.3MHz</p>

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▲ CHENNAI VOR (MMV) 125936.1N 0801014.5E		F460/F100 4100Ft Class D	20NM			
W25 (CHENNAI - TIRUCHIRAPALLI)						
▲ CHENNAI VOR (MMV) 125936.1N 0801014.5E	215/035 100NM	F460/F095 2300Ft Class D		↓	↑	1. Minimum 10 Min. longitudinal separation applicable. 2. Caution - bird concentration over Algarcoil Hill, elevation 831M and located 032 ⁰ /18NM from Madurai VOR (MDI). 3. When VOR168 &/or VOR169 is active, routing between Chennai VOR (MMV) and Tiruchirapali VOR (TTR) via Kanchipuram VOR (KKP). 4. Chennai ACC 118.9MHz, 125.3MHz 5. Trivandrum ACC 125.95MHz, 120.9MHz
▲ TANGO 113510.5N 0791454.0E	215/035 58NM					
▲ TIRUCHIRAPALLI VOR (TTR) 104544.7N 0784248.2E	217/037 67NM	F460/F095 4000Ft Class D				
▲ MADURAI VOR (MDI) 094951.9N 0780520.5E	224/043 107NM	F460/F095 7700Ft Class D				
▲ THIRUVANANTHAPURAM VOR (TVM) 082829.3N 0765529.0E						
W26 (HYDERABAD - VIJAYWADA)						
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E	109/290 143NM	F460/F095 3900Ft Class D	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable. 2. Hyderabad ACC 128.35MHz, 120.95MHz. 3. Vijaywada TWR 123.5MHz
▲ VIJAYWADA VOR (BBZ) 163118.3N 0804733.7E						
W27 (NAGPUR - HYDERABAD)						
▲ NAGPUR VOR (NNP) 210452.7N 0790321.8E	207/027 122NM	F460/F250 3700Ft Class D	20NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA, CTR, Class 'E' airspace. 3. Nagpur ACC 123.9MHz, 122.7MHz, 133.65Mhz 4. Hyderabad ACC 128.35MHz, 120.95MHz.
▲ BUSBO 191458.2N 0780730.3E	206/026 88NM	F460/F250 3500Ft Class D				
▲ BIDAR NDB (BR) 175503.6N 0772955.6E	149/329 41NM	F460/F250 3900Ft Class D				
▲ VIKARABAD NDB (VB) 172003.8N 0775255.5E	104/284 31NM	F460/F250 3600Ft Class D				

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E		F460/F250 3600Ft Class D				
W28 (HYDERABAD - MUMBAI)						
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E	275/095 92NM	F460/F250 3900Ft Class D	20NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Eastbound flights shall enter Pune Restricted Area VAR37 at or above FL150 and reach FL250 atleast 5NM before PUNE VOR (PUN). 3. Westbound flights to commence descent 5NM west of PUNE VOR (PUN) and to leave VAR37 at or above FL150. 4. Hyderabad ACC 128.35MHz, 120.95MHz. 5. Pune TWR 123.5MHz 6. Mumbai ACC 125.35MHz, 132.7MHz, 120.5MHz
▲ GULBARGA VOR (GGB) 171848.8N 0764811.0E	298/118 51NM	F460/F250 4500Ft Class D				
▲ ATAPO (VOME/VABF FIR) 174027.7N 0755956.3E	297/116 131NM	F460/F250 3900Ft Class D				
▲ PUNE VOR (PUN) 183447.9N 0735451.2E	299/119 66NM					
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E						
W29 (HYDERABAD - VISHAKAPATNAM)						
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E	091/272 99NM	F460/F075 3900Ft Class D	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable. 2. Hyderabad ACC 128.35MHz, 120.95MHz. 3. Kolkata ACC 132.45MHz 4. Vishakapatnam TWR 119.7MHz
▲ KHAMAMPET NDB (KM) 171433.9N 0800824.4E	083/264 180NM					
▲ VISHAKAPATNAM VOR (VVZ) 174003.9N 0831510.0E		F460/F075 5600Ft Class E				
W30 [West Bound] (DELHI - PATHANKOT)						
▲ DELHI VOR (DPN) 283400.2N 0770541.5E	297 100NM	F460/F085 3000Ft Class F	20NM		↓	1. Aircraft when between BUTOP and Amritsar VOR (AAR); to contact Halwara TWR on 122.7MHz for traffic information. 2. Airspace bounded by coordinates - 2952N 07551E, 2943N 07555E, 2933N 07519E, 2942N 07518E between FL100 to FL120 reserved for Indian Air Force aircraft crossing the ATS route.
▲ BUTOP 291944.8N 0752356.3E	352 89NM	F460/F200 2400Ft Class F				
▲ ASARI 304815.3N 0750931.4E	341 57NM	F460/F085 2500Ft Class F				

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ AMRITSAR VOR (AAR) 314225.0N 0744803.0E	073 38NM	F460/F085 2500Ft Class F	20NM		↓	3. Delhi ACC 124.55MHz, 124.2MHz
▲ BOKAD 315248.9N 0753045.1E	015 22NM	F460/F085 2500Ft Class F				
▲ PATHANKOT NDB (PK) 321425.8N 0753759.0E		F460/F085 2500Ft Class F				
W30 [East Bound] (PATHANKOT - DELHI)						
▲ PATHANKOT NDB (PK) 321425.8N 0753759.0E	195 22NM	F460/F085 2500Ft Class F	20NM		↓	1. Aircraft when between ELKUX and Amritsar VOR (AAR); to contact Halwara TWR on 122.7MHz for traffic information. 2. Airspace bounded by coordinates - 2952N 07551E, 2943N 07555E, 2933N 07519E, 2942N 07518E between FL100 to FL120 reserved for Indian Air Force aircraft crossing the ATS route. 3. Delhi ACC 124.55MHz, 124.2MHz
▲ BOKAD 315248.9N 0753045.1E	253 38NM	F460/F085 2400Ft Class F				
▲ AMRITSAR VOR (AAR) 314225.0N 0744803.0E	161 57NM	F460/F085 2800Ft Class F				
▲ ASARI 304815.3N 0750931.4E	162 61NM	F460/F200 2800Ft Class F				
▲ ELKUX 295029.7N 0753041.2E	132 73NM	F460/F085 2800Ft Class F				
▲ IGINO 290105.6N 0763207.4E	132 40NM					
▲ DELHI VOR (DPN) 283400.2N 0770541.5E						
W31 [West Bound] (DELHI - SRINAGAR)						
▲ DELHI VOR (DPN) 283400.2N 0770541.5E	297 100NM	F460/F085 3000Ft Class F	20NM		↓	1. Aircraft when between BUTOP and Pathankot NDB (PK); to contact Halwara TWR on 122.7MHz for traffic information. 2. Delhi ACC 124.55MHz, 124.2MHz
▲ BUTOP 291944.8N 0752356.3E	352 89NM	F460/F200 2400Ft Class F				
▲ ASARI 304815.3N 0750931.4E	015 89NM	F460/F200 2500Ft Class F				

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ PATHANKOT NDB (PK) 321425.8N 0753759.0E	344 78NM	F460/F180 16600Ft Class F				3. Airspace bounded by coordinates - 2952N 07551E, 2943N 07555E, 2933N 07519E, 2942N 07518E between FL100 to FL120 reserved for Indian Air Force aircraft crossing the ATS route.
▲ MESAR 332958.3N 0751356.2E	320 38NM	F460/F085 10300Ft Class F	20NM	↓		4. Civil aircraft will maintain FL280 or FL320 or FL340 or FL360 or FL380 or FL400 or FL430 between ASARI to Srinagar VOR (SNG).
▲ SRINAGAR VOR (SNG) 340007.1N 0744516.5E						
W31 [East Bound] (SRINAGAR - DELHI)						
▲ SRINAGAR VOR (SNG) 340007.1N 0744516.5E	140 39NM	F460/F180 10300Ft Class F	10NM	↓		1. Aircraft when between ELKUX and Pathankot NDB (PK); to contact Halwara TWR on 122.7MHz for traffic information. 2. Airspace bounded by coordinates - 2952N 07551E, 2943N 07555E, 2933N 07519E, 2942N 07518E between FL100 to FL120 reserved for Indian Air Force aircraft crossing the ATS route. 3. Civil aircraft will maintain FL270 or FL290 or FL330 or FL370 or FL410 or FL450 between Srinagar VOR (SNG) TO ASARI. 4. Delhi ACC 124.55MHz, 124.2MHz
▲ MESAR 332958.3N 0751356.2E	163 78NM	F460/F180 16600Ft Class F				
▲ PATHANKOT NDB (PK) 321425.8N 0753759.0E	195 89NM	F460/F085 2500Ft Class F				
▲ ASARI 304815.3N 0750931.4E	162 61NM	F460/F200 2400Ft Class F				
▲ ELKUX 295029.7N 0753041.2E	132 73NM	F460/F200 2800Ft Class F				
▲ IGINO 290105.6N 0763207.4E	132 40NM					
▲ DELHI VOR (DPN) 283400.2N 0770541.5E						
W33 [South Bound] (DELHI - VARANASI)						
▲ DELHI VOR (DPN) 283400.2N 0770542.1E	143 55NM	F460/F075 3400Ft Class D	20NM	↓		1. Outside CTR and CTA Class 'E' airspace 2. Delhi ACC 120.9MHz, 124.2MHz 3. Agra TWR 119.7MHz
▲ ITBAN 274943.4N 0774247.5E	144 7NM	F460/F075 3400Ft Class D				

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ GURTI 274345.5N 0774740.2E	165 36NM	F460/F075 5000Ft Class D	20NM	↓		
▲ AGRA VOR (AGG) 270900.7N 0775755.1E	143 75NM	F460/F075 3400Ft Class D		↓		
▲ NOBOM 260901.0N 0784854.7E	143 100NM	F460/F075 3400Ft Class D	20NM	↓		4. Khajuraho TWR 122.3MHz 5. Varanasi ACC 119.0MHz, 120.75MHz, 132.4MHz
▲ KHAJURAHO VOR (KKJ) 244853.5N 0795507.3E	077 131NM	F460/F075 3200Ft Class D		↓		
▲ BHITI 251939.5N 0821515.1E	077 34NM			↓		
▲ VARANASI VOR (BBN) 252714.5N 0825133.8E				↓		
W33 [North Bound] (VARANASI - KHAJURAHO - AGRA - DELHI)						
▲ VARANASI VOR (BBN) 252714.5N 0825133.8E	258 34NM	F460/F075 3200Ft Class D	20NM			1. Outside CTR and CTA Class 'E' airspace 2. Varanasi ACC 119.0MHz, 120.75MHz, 132.4MHz 3. Khajuraho TWR 122.3MHz 4. Agra TWR 119.7MHz 5. Delhi ACC 120.9MHz, 124.2MHz
▲ BHITI 251939.5N 0821515.1E	258 131NM			↓		
▲ KHAJURAHO VOR (KKJ) 244853.5N 0795507.3E	323 100NM	F460/F075 3400Ft Class E		↓		
▲ NOBOM 260901.0N 0784854.7E	323 75NM			↓		
▲ AGRA VOR (AGG) 270900.7N 0775755.1E	281 21NM			↓		
▲ POSIG 271300.6N 0773455.3E	342 20NM	F460/F075 3100Ft Class E		↓		
▲ LETPU 273220.5N 0772800.3E	342 65NM	F460/F075 3000Ft Class D		↓		
▲ DELHI VOR (DPN) 283400.2N 0770542.1E						

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
W34 (PATHANKOT - JAMMU - SRINAGAR)						
▲ PATHANKOT NDB (PK) 321425.8N 0753759.0E	340/160 21NM	F460/F100 4300Ft Class F	20NM	↑	↓	
▲ BIKUX 323421.7N 0753003.1E	281/101 34NM	F460/F100 4300Ft Class F	20NM	↑	↓	
▲ JAMMU VOR (JJU) 324129.6N 0745015.5E	021/201 52NM	F460/F075 8800Ft Class F				
▲ MESAR 332958.3N 0751356.2E	321/140 39NM	F460/F180 16600Ft Class F				
▲ SRINAGAR VOR (SNG) 340007.1N 0744516.5E						
W35 (DELHI - CHANDIGARH - KULU)						
▲ DELHI VOR (DPN) 283400.2N 0770541.5E	011/191 88NM	F460/F075 2400Ft Class F	20NM	↓	↑	1. Delhi APP 127.9MHz 2. Delhi ACC 124.55MHz, 124.2MHz 3. Kulu TWR 122.3MHz
▲ SARSAWA NDB (SP) 295959.7N 0772555.2E	333/152 27NM	F460/F075 3700Ft Class F				
▲ ONOGI 302359.5N 0771155.3E	308/128 26NM	F460/F075 3100Ft Class F				
▲ CHANDIGARH VOR (CHG) 304003.4N 0764820.5E	013/193 75NM	F460/F150 12600Ft Class F				
▲ KULU (Bhantar) NDB (BNR) 315254.0N 0770905.3E						
W36 (CHANDIGARH - AMRITSAR)						
▲ CHANDIGARH VOR (CHG) 304003.4N 0764820.5E	291/111 29NM	F460/F075 3500Ft Class E	20NM	↑	↓	1. Outside CTR and CTA, Class 'E' airspace. 2. Amritsar APP 119.7MHz 3. From IBANA to Ludhiana routing direct (090 ⁰ /17NM).
▲ IBANA 305059.3N 0761655.8N	292/112 29NM	F460/F075 3500Ft Class E				

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ LAKET 310659.2N 0752856.2E	315/135 50NM	F460/F075 2400Ft Class E	20NM	↑	↓	
▲ AMRITSAR VOR (AAR) 314225.0N 0744803.0E		F460/F075 2400Ft Class E		↑	↓	
W37 (DELHI - PANTNAGAR)						
▲ DELHI VOR (DPN) 283400.2N 0770541.5E	108/289 34NM	F460/F075 2600Ft Class F	20NM	↓	↑	1. Delhi ACC 124.55MHz, 124.2MHz
▲ SIKANDARABAD VOR (SSB) 282300.2N 0774232.2E	085/265 57NM					
▲ PUMOT 282800.3N 0784654.6E	032/212 25NM	F460/F075 2300Ft Class F		↓	↑	
▲ DOPOS 284900.2N 0790154.5E	061/241 27NM			↓	↑	
▲ PANTNAGAR NDB (HW) 290152.1N 0792825.3E		F460/F075 2200Ft Class F				
W38 (BHOPAL - HYDERABAD)						
▲ BHOPAL VOR (BPL) 231657.9N 0772009.1E	131/311 57NM	F460/F075 3900Ft Class E	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable 2. Nagpur ACC 123.9MHz, 122.7MHz, 133.8MHz 3. Hyderabad ACC 128.35MHz, 120.95MHz.
▲ DELTA 224002.2N 0780755.2E	152/333 108NM	F460/F075 5600Ft Class E		↓	↑	
▲ NAGPUR VOR (NNP) 210452.7N 0790321.8E	166/346 191NM			↓	↑	
▲ BOBED (VABF/VOMF FIR) 180003.6N 0795542.5E	166/346 47NM	F460/F075 2700Ft Class E		↓	↑	
▲ KHAMAMPET NDB (KM) 171433.9N 0800824.4E	272/091 99NM	F460/F075 3900Ft Class D		↓	↑	
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E						

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
W39 (DELHI - LEH)						
▲ DELHI VOR (DPN) 283400.2N 0770541.5E	011/191 88NM	F460/F290 2700Ft Class F	20NM	↓	↑	1. Delhi ACC 120.9MHz, 124.2MHz
▲ SARSAWA NDB (SP) 295959.7N 0772555.2E	004/184 144NM	F460/F290 25200Ft Class F	20NM	↓	↑	
▲ LELAX 322328.8N 0773755.0E	357/177 105NM	F460/F290 24600Ft Class F				
▲ LEH NDB (LH) 342328.1N 0773154.9E						
W40 (LUCKNOW - AHMEDABAD)						
▲ LUCKNOW VOR (LLK) 264543.9N 0805249.7E	231/051 32NM	F460/F100 2500Ft Class D	20NM	↑	↓	1. Outside CTR and CTA, Class 'E' airspace. 2. Delhi ACC 120.9MHz, 124.2MHz 3. Lucknow APP 119.7MHz 4. Khajuraho TWR 122.3MHz 5. Nagpur ACC 123.9MHz, 122.7MHz 6. Bhopal APP 118.05MHz, 124.3MHz 7. Mumbai FIC 132.7MHz, 125.35MHz, 120.5MHz 8. Ahmedabad ACC 123.75MHz, 134.2MHz
▲ KANPUR NDB (KA) 262501.0N 0802353.9N	196/016 96NM	F460/F100 3200Ft Class D				
▲ IGONA 255800.3N 0801530.1E	195/015 72NM					
▲ KHAJURAHO VOR (KKJ) 244853.5N 0795507.3E	238/057 89NM	F460/F075 3400Ft Class D				
▲ BOBET 240031.7N 0783239.9E	238/057 79NM	F460/F075 3800Ft Class D				
▲ BHOPAL VOR (BPL) 231657.9N 0772009.1E	248/068 91NM	F460/F075 4000Ft Class D				
▲ INDORE VOR (IID) 224322.1N 0754824.3E	267/086 88NM	F460/F075 3500Ft Class D				
▲ BODAR 230419.9N 0741317.1E	289/108 93NM	F460/F075 5300Ft Class D				
▲ AHMEDABAD VOR (AAE) 230405.4N 0723744.8E						

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
W41 (HYDERABAD - KOLKATA)						
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E	091/272 99NM	F460/F075 3900Ft Class D	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable.
▲ KHAMAMPET NDB (KM) 171433.9N 0800824.4E	062/242 71NM	F460/F075 3300Ft Class E	20NM	↓	↑	2. Outside CTA & CTR, Class 'E' airspace.
▲ SAPNU (VOMF/VECF FIR) 175009.7N 0811317.9E	062/242 51NM					3. Hyderabad ACC 128.35MHz, 120.95MHz.
▲ NOLOV (VABF/VECF FIR) 181521.6N 0815953.6E	062/243 144NM					4. Nagpur ACC 123.9MHz, 122.7MHz, 133.65MHz,
▲ DORIL 192533.4N 0841252.5E	063/243 30NM					5. Kolkata ACC 132.45MHz, 120.7MHz, 125.9MHz,
▲ MEPOL 193945.3N 0844022.3E	062/242 73NM					
▲ BHUBANESWAR VOR (BBS) 201437.2N 0854846.7E	071/252 71NM	F460/F075 2500Ft Class D		↓	↑	
▲ KAKID 203833.1N 0865951.2E	047/227 85NM	F460/F075 1600Ft Class D		↓	↑	
▲ LEGOS 213802.9N 0880520.6E	020/199 64NM	F460/F075 2100Ft Class D				
▲ KOLKATA VOR (CEA) 223842.6N 0882710.4E						
W42S (BANGALORE - TIRUCHIRAPALLI)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	190 69NM	F460/F115 7800Ft Class D	20NM			1. Minimum 10 Min. longitudinal separation applicable.
▲ APGUN 120339.94N0773457.76E	142 102NM	F460/F115 6100Ft Class D				2. Aircraft shall contact HAL ATC before entering VOR181A & C on 127.7MHz, 122.7MHz.
▲ TIRUCHIRAPALLI VOR(TTR) 104544.7N 0784248.2E						3. Bangalore APP 121.25MHz, 127.75MHz. 4. Tiruchirapalli APP 118.3MHz, 119.7MHz

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
W42N (TIRUCHIRAPALLI-BANGALORE)						
▲ TIRUCHIRAPALLI VOR(TTR) 104544.7N 0784248.2E	341/161 158NM	F460/F070 6600Ft Class D	20NM	↑		1. Minimum 10 Min. longitudinal separation applicable. 2. Aircraft shall contact HAL ATC before entering VOR181A & C on 127.7MHz, 122.7MHz. 3. Bangalore APP 121.25MHz, 127.75MHz. 4. Tiruchirapalli APP 118.3MHz, 119.7MHz
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E						
W43(NORTH BOUND) (THIRUVANANTHPURAM-BANGALORE)						
▲ THIRUVANANTHPURAM VOR (TVM) 082829.3N 0765529.0E	006/186 154NM	F460/F150 10900Ft Class D	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable. 2. Aircraft shall contact HAL ATC before entering VOR181 B & C on 127.7MHz, 122.7MHz. 3. Bangalore APP 121.25MHz, 127.75MHz. 4. Coimbatore APP 122.3MHz 5. Trivandrum ACC 125.95MHz 6. Route Bi directional between CCB and TVM VOR.
▲ COIMBATORE VOR (CCB) 110201.6N 0770253.0E	014 68NM	F460/F115 7800Ft Class D				
▲ UGABA 120859.14N 0771729.41E	025 68NM	F460/F115 7800Ft Class D		↓	↑	
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E						
W43(SOUTH BOUND) (BANGALORE -THIRUVANANTHPURAM)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	189 69NM	F460/F115 7800Ft Class D	20NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Aircraft shall contact HAL ATC before entering VOR181 B & C on 127.7MHz, 122.7MHz. 3. Bangalore APP 121.25MHz, 127.75MHz. 4. Coimbatore APP 122.3MHz 5. Trivandrum ACC 125.95MHz 6. Route Bi directional between CCB and TVM VOR.
▲ APGUN 120339.94N0773457.76E	209 69NM	F460/F115 7800Ft Class D				
▲ COIMBATORE VOR (CCB) 110201.6N 0770253.0E	186/006 154NM	F460/F150 10900Ft Class D		↑	↓	
▲ THIRUVANANTHPURAM VOR (TVM) 082829.3N 0765529.0E						

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
W44(VARANASI-PATNA)						
▲ VARANASI VOR (BBN) 252714.5N 0825133.8E	086/266 57NM	F460/F100 2300Ft Class D	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA & CTR, Class 'E' airspace. 3. Varanasi ACC 119.0MHz, 120.75MHz 4. Patna APP 121.1MHz
▲ IBUSU 253131.5N 0835507.3E	086/266 64NM	F460/F100 2200Ft Class D				
▲ PATNA VOR (PPT) 253525.5N 0850523.7E						
W45 (LUCKNOW - GUWAHATI)						
▲ LUKNOW VOR (LLK) 264543.9N 0805249.7E	106/288 152NM	F460/F085 2400Ft Class D	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA & CTR, Class 'E' airspace. 3. Between Patna VOR (PPT) and Lucknow VOR (LLK); ATC service is provided by Varanasi ACC on 132.4MHz from FL270 to FL460. 4. Kolkata ACC 120.1MHz, 126.1MHz, 125.9MHz 5. Guwahati ACC 123.9MHz
▲ BODOG 260137.1N 0833455.3E	108/288 86NM	F460/F085 2400Ft Class D				
▲ PATNA VOR (PPT) 253525.5N 0850523.7E	079/259 73NM	F460/F290 1700Ft Class D				
▲ NIRAB 255001.5N 0862436.1E	079/259 84NM	F460/F290 1600Ft Class D				
▲ KISHANGANJ NDB (KG) 260604.5N 0875630.3E	031/211 41NM	F460/F290 4500Ft Class D				
▲ BAGHDOGRA VOR (BBD) 264126.1N 0881935.2E	101/281 33NM	F460/F075 4000Ft Class D				
▲ OPIMO 263457.5N 0885549.8E	101/282 95NM	F460/F075 3200Ft Class D				
▲ DUKUM 261631.7N 0903949.1E	102/283 51NM	F460/F075 3900Ft Class D				
▲ GUWAHATI VOR (GGT) 260606.8N 0913508.7E						
W46 (COCHIN INTERNATIONAL - MADURAI)						

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ COCHIN INTERNATIONAL (CIA) 100901.8N 0762221.3E	115/295 40NM	F460/F110 7600Ft Class D	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable. 2. Cochin International APP 119.75MHz 3. Madurai APP 122.8MHz
▲ ARONA 095416.9N 0765937.0E	097/277 65NM	F460/F110 8700Ft Class D				
▲ MADURAI VOR (MDI) 094951.9N 0780520.5E						
W47N (BANGALORE - VISHAKAPATNAM)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	048 71NM	F460/F110 6200Ft Class D	20NM	↓		
▲ ANIRO 140209.8N 0783630.2E	042 73NM	F460/F110 5300Ft Class D	20NM	↓		1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA & CTR, Class 'E' airspace. 3. Bangalore APP 121.25MHz, 127.75MHz 4. Kolkata ACC 132.45MHz. 5. Chennai ACC 118.9MHz, 125.3MHz
▲ BODEL 145830.5N 0792511.8E	042 122NM	F460/F110 5100Ft Class D				
▲ VIJAYWADA VOR (BBZ) 163118.3N 0804733.7E	066/246 86NM	F460/F110 3300Ft Class D				
▲ BITEM (VOMF/VECF FIR) 170916.0N 0820759.5E	066/246 71NM	F460/F110 4100Ft Class D				
▲ VISHAKAPATNAM VOR (VVZ) 174003.9N 0831510.0E						
W47 [South Bound] (VISHAKAPATNAM - BANGALORE)						
▲ VISHAKAPATNAM VOR (VVZ) 174003.9N 0831510.0E	246/066 71NM	F460/F110 4100Ft Class D	20NM	↓		1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA & CTR, Class 'E' airspace. 3. Bangalore APP 121.25MHz, 127.75MHz 4. Kolkata ACC 132.45MHz
▲ BITEM (VOMF/VECF FIR) 170916.0N 0820759.5E	246/066 86NM	F460/F110 3300Ft Class D				
▲ VIJAYWADA VOR (BBZ) 163118.3N 0804733.7E	238 151NM	F460/F110 4200Ft Class D				
▲ VABDI 150551.18N 0783801.51E	207 125NM	F460/F110 3300Ft Class D				

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E		F460/F110 6000Ft Class D				
W49 (BHUBANESWAR - KHAJURAHO)						
▲ BHUBANESWAR VOR (BBS) 201437.2N 0854846.7E	312/130 182NM	F270/F075 4100Ft Class D	20NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA & CTR, Class 'E' airspace. 3. Kolkata ACC 132.45MHz 4. Bhubaneswar APP 123.5MHz 5. Khajuraho TWR 122.3MHz 6. Nagpur ACC 123.9MHz, 122.7MHz, 133.65MHz
▲ OTABA 221102.5N 0831922.8E	311/130 73NM	F270/F075 4700Ft Class D				
▲ IBUDA 230402.2N 0820953.3E	312/130 162NM	F270/F075 4900Ft Class D	20NM	↑	↓	
▲ KHAJURAHO VOR (KKJ) 244853.5N 0795507.3E		F270/F075 4900Ft Class D	20NM	↑	↓	
W50 (BHUBANESWAR - VARANASI)						
▲ BHUBANESWAR VOR (BBS) 201437.2N 0854846.7E	316/136 70NM	F460/F075 4000Ft Class D	20NM	↑	↓	1. Outside CTA & CTR, Class 'E' airspace. 2. Bhubaneswar APP 123.5MHz 3. Kolkata ACC 132.45MHz, 120.1MHz, 126.1MHz 4. Varanasi ACC 119.0MHz, 120.75MHz
▲ GUTID 210440.9N 0845552.1E	316/136 70NM					
▲ JARSUGUDA NDB (JH) 215347.6N 0840219.5E	344/164 114NM	F460/F075 5600Ft Class D		↑	↓	
▲ LAPAN 234355.0N 0832607.6E	344/164 109NM	F460/F075 5600Ft Class D		↑	↓	
▲ VARANASI VOR (BBN) 252714.5N 0825133.8E						
W51 (GUWAHATI - JORHAT - DIBRUGARH)						
▲ GUWAHATI VOR (GGT) 260608.8N 0913506.7E	075/255 41NM	F460/F075 3600Ft Class F	20NM	↓	↑	1. Guwahati ACC 123.9MHz 2. Dibrugarh APP 122.7MHz
▲ IGOTU 261649.8N 0921914.3E	075/255 31NM			↓	↑	

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ RUPAK 262447.8N 0925240.0E	075/255 30NM	F460/F075 4500Ft Class F	20NM	↓	↑	
▲ MIKAG 263222.8N 0932505.8E	076/258 41NM			↓	↑	
▲ JORHAT VOR (JHT) 264231.8N 0940935.4E	045/225 37NM	F460/F075 1900Ft Class F		↓	↑	
▲ NOMAG 270853.7N 0943841.2E	045/225 29NM			↓	↑	
▲ DIBRUGARH VOR (DRG) 272918.1N 0950114.4E						
W52 (KOLKATA - PATNA)						
▲ KOLKATA VOR (CEA) 223842.6N 0882710.4E	315/135 129NM	F460/F075 2500Ft Class D	20NM	↑	↓	1. Outside CTA & CTR, Class 'E' airspace. 2. Kolkata ACC 120.1MHz, 126.1MHz, 125.9MHz 3. Patna APP 118.3MHz, 121.1MHz
▲ SAREK 240802.1N 0864551.0E	315/135 126NM	F460/F075 3900Ft Class D		↑	↓	
▲ PATNA VOR (PPT) 253525.5N 0850523.7E				↑	↓	
W53 (GUWAHATI - SILCHAR)						
▲ GUWAHATI VOR (GGT) 260608.8N 0913506.7E	134/314 79NM	F460/F095 7200Ft Class D	20NM	↓	↑	1. Guwahati ACC 123.9MHz 2. Silchar TWR 123.5MHz
▲ VENUM 251205.2N 0923841.3E	134/315 25NM			↓	↑	
▲ SILCHAR VOR (KKU) 245450.3N 0925841.1E				↓	↑	
W54 (AGARTALA - IMPHAL)						
▲ AGARTALA VOR (AAT) 235322.4N 0911423.0E	071/251 155NM	F460/F125 8200Ft Class F	20NM	↓	↑	1. Guwahati ACC 123.9MHz

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ IMPHAL VOR (IIM) 244603.4N 0935415.7E		F460/F125 8200Ft Class F	20NM			2. Agartala APP 123.5MHz, 122.7MHz 3. Imphal TWR 123.5MHz
W55 (AGARTALA - SILCHAR - DIMAPUR)						
▲ AGARTALA VOR (AAT) 235322.4N 0911423.0E	080/260 35NM	F460/F105 3600Ft Class F	20NM	↓	↑	1. Agartala APP 123.5MHz, 122.7MHz 2. Guwahati ACC 123.9MHz 3. Dimapur TWR 123.5MHz
▲ MEPAR 240002.5N 0915148.7E	049/229 82NM	F460/F105 8200Ft Class F	20NM	↓	↑	
▲ SILCHAR VOR (KKU) 245450.3N 0925841.1E	101/280 51NM	F460/F125 8200Ft Class F	20NM	↓	↑	
▲ IMPHAL VOR (IIM) 244603.4N 0935415.7E	355/175 67NM	F150/F130 11300Ft Class F	20NM	↓	↑	
▲ DIMAPUR VOR (DMR) 255251.0N 0934653.7E						
W56 [South Bound] (MUMBAI - BANGALORE)						
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E	168 120NM	F460/F100 4800FT CLASS D	20NM	↓		1. MUMBAI ACC 125.35MHZ, 132.7MHZ, 120.5MHZ 2. BANGALORE APP 121.25MHZ, 125.75MHZ 3. MANGALORE ACC 127.55MHZ, 128.7MHZ
▲ MABTA 170828.8N 0732145.6E	139 106NM	F460/F100 4800FT CLASS D				
▲ BELGAUM VOR (BBM) 155122.2N 0743701.0E	136 74NM					
▲ IBEPA (VABF/VOMF FIR) 150004.4N 0753241.6E	137 51NM	F460/F100 4400Ft CLASS D				
▲ UNSAL 142404.6N 0760956.3E	130 116NM	F460/F210 6000FT CLASS D				
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E						
W56 [NORTH Bound] (BANGALORE-MUMBAI)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	338 91NM	F460/F105 6800Ft Class D	20NM			1. Bangalore APP 121.25MHz, 127.75MHz

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ OPAMO 143534.6N 0770525.9E	343 36NM	F460/F105 6800Ft Class D	20NM		↓	2. Between Bellary VOR(BBI) and Mumbai VOR(BBB), deviation to the right and descent below FL250 PRIOR TO 55D from Mumbai VOR(BBB) may be approved by Mumbai ATC in coordination with pune ATC. 3. Mumbai ACC 125.35 MHz, 132.7MHz, 120.5 MHz.
▲ BELLARY VOR (BBI) 150954.4N 0765250.0E	318 73NM	F460/F250 6100Ft Class D			↓	
▲ MINIT (VABF/VOMF FIR) 160246.1N 0755956.4E	320 45NM	F460/F250 6200Ft Class D			↓	
▲ AGELA 163624.0N 0752757.0E	317 121NM				↓	
▲ AVKOR 180203.5N 0735757.3E	317 89NM				↓	
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E		F460/F250 6200Ft Class D	20NM		4. Chennai ACC 118.9MHz, 125.3MHz	
W57 [NORTH Bound] (BANGALORE-HYDERABAD)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	012 77NM	F460/F100 6400Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Bangalore APP 121.25MHz, 127.75MHz 3. Hyderabad ACC 128.35MHz, 120.95MHz. 4. Chennai ACC 118.9MHz, 125.3MHz
▲ LATID 142834.6N 0775655.5E	011 54NM				↓	
▲ VIRAM 152134.4N 0780555.4E	011 114NM	F460/F100 7500Ft Class D			↓	
▲ HYDERABAD VOR (HIA) 171340.11N 0782420.88E						
W57 [South Bound] (HYDERABAD-BANGALORE)						
▲ HYDERABAD VOR (HIA) 171340.11N 0782420.88E	176 128NM	F460/F100 4200Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Hyderabad ACC 128.35MHz, 120.95MHz.
▲ VABDI 150551.18N 0783801.51E	207 125NM	F460/F100 6000Ft Class D			↓	

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E					↓	4.Chennai ACC 118.9MHz, 125.3MHz
W58 (JAIPUR - JODHPUR - UDAIPUR)						
▲ JAIPUR VOR (JJP) 264930.7N 0754801.2E	256/076 149NM	F460/F075 4100Ft Class D	20NM	↑	↓	1. Jaipur TWR 125.25MHz 2. Jodhpur TWR 118.3MHz 3. Udaipur TWR 122.3MHz
▲ JODHPUR VOR (JJO) 261400.9N 0730257.6E	155/335 107NM	F460/F075 5500Ft Class D		↑	↓	
▲ UDAIPUR VOR (UUD) 243646.4N 0735338.7E						
W61 (MUMBAI - RAJKOT - JAMNAGAR)						
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E	331/151 97NM	F460/F075 3700Ft Class D	20NM	↓	↑	1. Aircraft after departure from Rajkot or overflying Rajkot VOR (RKT) for Bhuj/Kandla, to contact Jamnagar ATC on 123.5MHz till crossing GULF, Follow reverse procedure for flight from Bhuj/Kandla to Rajkot/Mumbai. 2. Mumbai ACC 132.7MHz, 120.5MHz
▲ BOMBA 202838.7N 0725231.3E	329/149 130NM					
▲ RAJKOT VOR (RKT) 221847.1N 0704641.7E	286/106 41NM					
▲ JAMNAGAR NDB (JMR) 222937.1N 0700259.1E						
W62 (RAJKOT - AHMEDABAD)						
▲ RAJKOT VOR (RKT) 221847.1N 0704641.7E	067/247 112NM	F460/F075 1600Ft Class D	20NM	↓	↑	1. Ahmedabad ACC 123.75MHz, 134.2MHz
▲ AHMEDABAD VOR (AAE) 230405.4N 0723744.8E		F460/F075 1600Ft Class D				
W63 (KESHOD - AHMEDABAD)						
▲ KESHOD NDB (KS) 211906.5N 0701542.0E	052/233 168NM	F460/F075 4700Ft Class D	20NM	↓	↑	1. Route available as contingency route for international flights.

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ AHMEDABAD VOR (AAE) 230405.4N 0723744.8E		F460/F075 4700Ft Class D	20NM	↓	↑	2. Ahmedabad ACC 123.75MHz, 134.2MHz
W65 [North Bound] (JODHPUR - DELHI)						
▲ JODHPUR VOR (JJO) 261400.9N 0730257.6E	052 154NM	F460/F080 5000Ft Class E	20NM		↓	1. Delhi ACC 124.55MHz, 124.2MHz
▲ BADAT 274906.4N 0751908.4E	065 78NM	F460/F080 5000Ft Class D			↓	
▲ CHILLERKI VOR (CHI) 282100.2N 0763931.7E	060 26NM	F460/F080 3000Ft Class D			↓	
▲ DELHI VOR (DPN) 283400.2N 0770542.1E		F460/F080 3000Ft Class D			↓	
W65 [South Bound] (DELHI - JODHPUR)						
▲ DELHI VOR (DPN) 283400.2N 0770542.1E	213 55NM	F460/F080 3200Ft Class D	20NM	↓		1. Outside CTA & CTR, Class 'E' airspace. 2. Delhi ACC 124.55MHz, 124.2MHz
▲ REBON 274800.7N 0763120.6E	214 20NM	F460/F080 4100Ft Class D		↓		
▲ IKABA 273123.4N 0761850.3E	213 50NM	F460/F100 4100Ft Class D				
▲ JAIPUR VOR (JJP) 264930.7N 0754801.2E	256 149NM	F460/F080 4100Ft Class E		↓		
▲ JODHPUR VOR (JJO) 261400.9N 0730257.6E						
W66 (KHAJURAHO - VISHAKAPATNAM)						
▲ KHAJURAHO VOR (KKJ) 244853.5N 0795507.3E	176/356 98NM	F460/F120 4000Ft Class D	20NM	↓	↑	1. Outside CTA & CTR, Class 'E' airspace. 2. Khajuraho TWR 122.3MHz 3. Raipur TWR 122.30MHz 4. Nagpur ACC 123.9MHz, 122.7MHz, 133.65MHz 5. Vishakapatnam TWR 119.7MHz
▲ ASOPO 231109.1 0800338.3E	143/324 113NM			↓	↑	

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ DOSAT 214132.6N 0811823.7E	143/323 39NM	F460/F120 3800Ft Class D	20NM	↓	↑	
▲ RAIPUR VOR (RRP) 211047.8N 0814433.5E	159/339 30NM	F460/F120 3100Ft Class D		↓	↑	
▲ IKOSI 204302.9N 0815653.5E	159/340 131NM	F460/F120 7000Ft Class D		↓	↑	
▲ BILUN 184103.5N 0824853.5E	159/340 66NM			↓	↑	
▲ VISHAKAPATNAM VOR (VVZ) 174003.9N 0831510.0E				↓	↑	
W67 (PUNE - GOA)						
▲ PUNE VOR (PUN) 183447.9N 0735451.2E	177/357 33NM	F460/F080 Class D	20NM	↑	↓	1. Outside CTA & CTR, Class 'E' airspace. 2. Pune TWR 123.5MHz 3. Goa APP 119.7MHz
▲ AVKOR 180203.5N 0735757.3E	175/355 70NM					
▲ EPKOS 165307.9N 0740713.2E	193/013 92NM					
▲ GOA VOR (GGO) 152247.3N 0734845.4E						
W68 (KHAJURAHO - BHOPAL)						
▲ KHAJURAHO VOR (KKJ) 244853.5N 0795507.3E	238/057 89NM	F460/F210 3400Ft Class D	20NM	↑	↓	1. Khajuraho TWR 122.3MHz 2. Bhopal APP 124.3MHz
▲ BOBET 240031.7N 0783239.9E	238/057 79NM	F460/F210 3800Ft Class D				
▲ BHOPAL VOR (BPL) 231657.9N 0772009.1E						
W69 (KOLKATA - BAGHDOGRA)						

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ KOLKATA VOR (CEA) 223842.6N 0882710.4E	345/165 101NM	F460/F100 3400Ft Class D	20NM	↑	↓	1. Outside CTA & CTR, Class 'E' airspace. 2. Kolkata ACC 120.1Mhz, 126.1MHz, 125.9MHz
▲ ONOTO 241626.1N 0875728.5E	344/164 32NM			↑	↓	
▲ BIKIK 244646.9N 0874750.5E	345/165 49NM	F460/F100 3000Ft Class D		↑	↓	
▲ KATI HAR NDB (KH) 253401.7N 0873320.6E	034/214 38NM	F460/F100 2000Ft Class D		↑	↓	
▲ KISHANGANJ NDB (KG) 260604.5N 0875630.3E	031/211 41NM	F460/F100 4500Ft Class D		↑	↓	
▲ BAGHDOGRA VOR (BBD) 264126.1N 0881935.2E		F460/F100 4500Ft Class D		↑	↓	
W70 (BANGALORE - SRI SATYA SAI)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	006/186 57NM	F460/F150 6500Ft Class D	20NM	↑	↓	1. Outside CTA & CTR, Class 'E' airspace. 2. Bangalore APP 121.25MHz, 127.75MHz 3. Minimum 10 Min. longitudinal separation applicable. 4. Chennai ACC 118.9MHz, 125.3MHz
▲ SRI SATYA SAI NDB (SAI) 140859.7N 0774704.6E						
W71 [North Bound] (SRI SATYA SAI - HYDERABAD)						
▲ SRI SATYA SAI NDB (SAI) 140859.7N 0774704.6E	028/ 208 22NM	F460/F100 6400Ft Class D	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA & CTR, Class 'E' airspace. 3. Hyderabad ACC 128.35MHz, 120.95MHz. 4. Sri Satya Sai TWR 118.4Mhz
▲ LATID 142834.6N 0775655.5E	011 54NM				↓	
▲ VIRAM 152134.4N 0780555.4E	011 114NM				↓	
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E					↓	

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
W71 [South Bound] (HYDERABAD - SRI SATYA SAI)						
▲ HYDERABAD VOR (HIA) 171340.11N 0782420.88E	176 128NM	F460/F100 4200Ft Class D	20NM	↓	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Hyderabad ACC 128.35MHz, 120.95MHz. 3. Bangalore APP 121.25MHz, 127.75MHz
▲ VABDI 150551.18N 0783801.51E	229 55NM	F460/F100 6400Ft Class D				
▲ LATID 142834.6N 0775655.5E	208/028 22NM	F460/F100 6000Ft Class D				
▲ SRI SATYA SAI NDB (SAI) 140859.7N 0774704.6E						
W72 (CHENNAI - SRI SATYA SAI)						
▲ CHENNAI VOR (MMV) 125936.1N 0801014.5E	307/127 111NM	F460/F100 4800Ft Class D	20NM	↑	↓	1. Outside CTA & CTR, Class 'E' airspace. 2. Controlling authority Bangalore ATC. 3. Minimum 10 Min. longitudinal separation applicable. 4. Bangalore APP 127.7MHz, 122.7MHz
▲ ANIRO 140209.8N 0783630.2E	281/101 48NM	F460/F100 5500Ft Class D				
▲ SRI SATYA SAI NDB (SAI) 140859.7N 0774704.6E						
W73 [West Bound] (RANCHI - VARANASI)						
▲ JAMSHEDPUR VOR (JJS) 224844.5N 0861003.4E	304/ 123 55NM	F460/F075 5000Ft Class D	20NM	↓	↓	1. Jamshedpur TWR 122.1MHz 123.5 MHz. 2. Ranchi TWR 122.3MHz. 3. Varanasi ACC 119.0MHz, 120.75MHz. 4. Route segment Bi-Directional between JJS and RRC.
▲ RANCHI VOR (RRC) 231831.3N 0851935.8E	298 93NM	F460/F075 5000Ft Class D				
▲ PAROT 240036.0N 0834933.4E	329 101NM	F460/F075 4100Ft Class D				
▲ VARANASI VOR (BBN) 252714.5N 0825133.8E						
W73 [East Bound] (VARANASI - RANCHI)						

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ VARANASI VOR (BBN) 252714.5N 0825133.8E	133 186NM	F460/F075 5000Ft Class D	20NM		↑	1. Varanasi ACC 119.0MHz, 120.75MHz. 2. Ranchi TWR 122.3MHz. 3. Jamshedpur TWR 122.1MHz, 123.5MHz. 4. Route segment Bi-Directional between RRC and JJS.
▲ RANCHI VOR (RRC) 231831.3N 0851935.8E	123/ 304 55NM	F460/F075 5000Ft Class D			↑	
▲ JAMSHEDPUR VOR (JJS) 224844.5N 0861003.4E				↓	↑	
W74 (RAJKOT - BHUJ)						
▲ RAJKOT VOR (RKT) 221847.1N 0704641.7E	007/187 30NM	F460/F075 2600Ft Class D	20NM	↓	↑	1. Outside CTA & CTR. Class 'E' airspace 2. Rajkot APP 122.1MHz 3. Bhuj TWR 123.5MHz
▲ MORVI 224902.0N 0704958.7E	294/114 70NM	F460/F075 3000Ft Class D	20NM	↓	↑	
▲ BHUJ VOR (BBJ) 231701.8N 0693959.3E						
W75 (AURANGABAD - UDAIPUR)						
▲ AURANGABAD VOR (AAU) 195152.9N 0752338.1E	009/189 173NM	F460/F075 5000Ft Class D	20NM		↑	1. Aurangabad APP 122.3MHz 2. Udaipur TWR 122.3MHz
▲ INDORE VOR (IID) 224322.1N 0754824.3E	325/145 98NM	F460/F075 4200Ft Class D			↓	
▲ PRATAPGARH VOR (PRA) 240147.6N 0744502.8E	307/127 59NM	F460/F075 4700Ft Class D			↓	
▲ UDAIPUR VOR (UUD) 243646.4N 0735338.7E					↑	
W81 (BANGALORE - IGAMA)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	268/087 165NM	F460/F210 7800Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Bangalore APP 121.25MHz, 127.75MHz. 3. Mangalore ACC 127.55MHz, 128.7MHz.
▲ PEXEG 130415.1N0760230.2E	267/087 66NM	F460/F100 7800Ft Class D		↑	↓	

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ MANGALORE VOR (MML) 125740.6N 0745517.9E	287/107 176NM	F460/F100 3800Ft Class D	20NM	↑	↓	
▲ IGAMA 134104.8N 0715958.2E						
W82 (LENGPUI - SILCHAR)						
▲ LENGPUI VOR (LLP) 234949.6N 0923722.4E	017/197 68NM	F460/F100 7700Ft Class F	20NM	↓	↑	1. Lengpui TWR 122.25MHz 2. Silchar TWR 122.7MHz
▲ SILCHAR VOR (KKU) 245450.3N 0925841.1E						
W83 (LENGPUI - IMPHAL)						
▲ LENGPUI VOR (LLP) 234949.6N 0923722.4E	052/232 90NM	F460/F120 10300Ft Class F	20NM	↓	↑	1. Lengpui TWR 122.25MHz 2. Imphal TWR 123.5MHz
▲ IMPHAL VOR (IIM) 244603.4N 0935415.7N						
W84 (LENGPUI - AGARTALA)						
▲ LENGPUI VOR (LLP) 234949.6N 0923722.4E	285/105 43NM	F460/F100 7700Ft Class F	20NM	↑	↓	1. Lengpui TWR 122.25MHz 2. Agartala TWR 123.5MHz, 122.7MHz
▲ MEPAR 240002.5N 0915148.7E	260/080 35NM	F460/F100 3500Ft Class F				
▲ AGARTALA VOR (AAT) 235322.4N 0911423.0E		F460/F100 3500Ft Class F				
W85 (LUCKNOW - PANTNAGAR - DEHARADUN)						
▲ LUCKNOW VOR (LLK) 264543.9N 0805249.7E	332/152 155NM	F460/F110 4000Ft Class F	20NM	↑	↓	1. Lucknow APP 118.6MHz, 119.7MHz 2. Dehradun TWR 122.3MHz
▲ PANTNAGAR NDB (HW) 290152.1N 0792825.3E	316/136 97NM	F460/F110 9300Ft Class F				

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ DEHRADUN NDB (JG) 301123.6N 0781027.8E						
W88 (SRI SATYA SAI - GULBARGA)						
▲ SRI SATYA SAI NDB (SAI) 140859.7N 0774704.6E	322/142 80NM	F460/F100 4800Ft Class F	20NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Sri Satya Sai TWR 118.4MHz 3. Chennai ACC 118.9MHz, 125.3MHz
▲ BELLARY VOR (BBI) 150954.4N 0765250.0E	360/180 129NM			↑	↓	
▲ GULBARGA VOR (GGB) 171848.8N 0764811.0E				↑	↓	
W90 (BHUBANESWAR - VISHAKAPATNAM)						
▲ BHUBANESWAR VOR (BBS) 201437.2N 0854846.7E	206/026 75NM	F460/F075 1500Ft Class E	20NM	↑	↓	1. Outside CTA & CTR, Class 'E' airspace. 2. When VED50 is active, aircraft to follow route Bhubaneswar VOR (BBS) - [242°/062°, 73NM] - MEPOL - [216°/036°, 144NM] - Vishakapatnam VOR (VVZ), at or below FL210 between Bhubaneswar VOR (BBS) and Vishakapatnam VOR (VVZ). 3. Bhubaneswar APP 123.50MHz 4. Vishakapatnam TWR 119.7MHz, 123.5MHz. 5. Kolkata ACC 132.45MHz
▲ ISMON 190703.5N 0851552.0E	234/054 28NM	F460/F075 2900Ft Class F		↑	↓	
▲ LARIK 185003.6N 0845222.2E	235/054 116NM			↑	↓	
▲ VISHAKAPATNAM VOR (VVZ) 174003.9N 0831510.0E				↑	↓	
W91 (COCHIN INTERNATIONAL - THIRUVANANTHAPURAM)						
▲ COCHIN INTERNATIONAL VOR (CIA) 100901.8N 0762221.3E	140 52NM	F460/F080 6500Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Cochin Intl. APP 119.75MHz 3. Trivandrum ACC 125.95MHz 120.9MHz
▲ TUMLA 093045.0E 0765830.0E	186 62NM				↓	
▲ THIRUVANANTHAPURAM VOR (TVM) 082829.3N 0765529.0E					↓	

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
W92 (COCHIN INTERNATIONAL - POMAN)						
▲ COCHIN INTERNATIONAL VOR (CIA) 100901.8N 0762221.3E	296/115 279NM	F460/F150 3000Ft Class E	40NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable based on Mach Number technique. 2. ATS route available for international flights. 3. Cochin Intl. APP 119.75MHz
▲ POMAN 115605.3N 0715958.2E						
W93 (CALICUT - POMAN)						
▲ CALICUT VOR (CLC) 110805.5N 0755717.5N	285/104 237NM	F460/F150 3100Ft Class E	40NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable based on Mach Number technique. 2. ATS route available for international flights. 3. Calicut TWR 123.35MHz, 122.95MHz
▲ POMAN 115605.3N 0715958.2E		F460/F150 3100Ft Class E		↑	↓	
W94 (VADODARA - UDAIPUR)						
▲ VADODARA VOR (QQZ) 221958.2N 0731330.5E	016/196 142NM	F460/F100 4200Ft Class E	20NM	↓	↑	1. Vadodara TWR 122.35MHz 2. Udaipur TWR 122.3MHz
▲ UDAIPUR VOR (UUD) 243646.4N 0735338.7E						
W95 (VADODARA - PRATAPGARH)						
▲ VADODARA VOR (QQZ) 221958.2N 0731330.5E	040/220 132NM	F460/F110 4200Ft Class E	20NM	↓	↑	1. Vadodara TWR 122.35MHz 2. Ahmedabad ACC 123.75MHz, 134.2Mhz
▲ PRATAPGARH VOR (PRA) 240147.6N 0744502.8E						
W96 (TIRUPATI - BODEL)						
▲ TIRUPATI VOR (TTP) 133805.9N 0793348.8E	357/177 81NM	F460/F110 5100Ft Class E	20NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Tirupati TWR 119.0MHz

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ BODEL 145830.5N 0792511.8E						3. Chennai ACC 118.9MHz, 125.3MHz
W97 (VADODARA - AHMEDABAD)						
▲ VADODARA VOR (QQZ) 221958.2N 0731330.5E	324/144 55NM	F460/F075 2500Ft Class E	20NM		↓	1. Ahmedabad ACC 123.75MHz, 134.2MHz
▲ AHMEDABAD VOR (AAE) 230405.4N 0723744.8E				↑		
W98 (SRI SATYA SAI - GULBARGA)						
▲ SRI SATYA SAI NDB (SAI) 140859.7N 0774704.6E	346/166 198NM	F460/F100 4200Ft Class E	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Sri Satya Sai TWR 118.4MHz
▲ GULBARGA VOR (GGB) 171848.8N 0764811.0E				↑		
W99 (NAGPUR - JABALPUR)						
▲ NAGPUR VOR (NNP) 210452.7N 0790321.8E	027/207 98NM	F460/F075 4400Ft Class E	20NM			Nagpur ACC 123.9MHz / 132.3MHz / 133.65MHz
▲ SABAP 223305.3N 0794956.4E	019/199 40NM	F460/F075 4400Ft Class E				
▲ JABALPUR DVOR (JJB) 231048.6N 0800333.3E						
W100 (RANCHI - KINKI)						
▲ RANCHI VOR (RRC) 231831.3N 0851935.8E	233/053 98NM	F460/F080 4800Ft Class E	20NM		↓	1. Kolkata ACC 120.1MHz, 126.1MHz, 125.9MHz 2. Ranchi TWR 122.3MHz
▲ KINKI 221917.5N 0835537.5E					↑	
W101 [EAST BOUND] (GOA - BANGALORE)						

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ GOA VOR (GGO) 152247.3N 0734845.4E	115 086NM	F460/F080 5000Ft Class E	20NM	↓		1. Outside CTR and CTA, Class 'E' airspace. 2. Minimum 10 Min. longitudinal separation applicable. 3. Goa APP 119.7MHz 4. Bangalore APP 121.25MHz, 127.75MHz. 5. Mangalore ACC 127.55MHz, 128.7MHz.
▲ IDSIB 144830.2N0750954.6E	115 063NM					
▲ UNSAL 142404.6N 0760956.3E	130 116NM	F460/F210 6000Ft Class E		↓		
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E						
W101 [West Bound] (BANGALORE - GOA)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	295 138NM	F460/F210 6100Ft Class E	20NM	↓		1. Outside CTR and CTA, Class 'E' airspace. 2. Minimum 10 Min. longitudinal separation applicable. 3. Goa APP 119.7MHz 4. Bangalore APP 121.25MHz, 127.75MHz. 5. Mangalore ACC 127.55MHz, 128.7MHz.
▲ GUNIM 140508.3N0753208.5E	310 127NM	F460/F080 6000Ft Class E				
▲ GOA VOR (GGO) 152247.3N 0734845.4E						
W103 (TAXUN -BRAVO)						
▲ TAXUN 211906.5N 0701542.0E	238/058 34NM	F460/F250 1500Ft Class E	40NM	↓	↑	1. Route available as contingency route for international flights. 2. Minimum 10 Min. longitudinal separation applicable based on Mach Number technique. 3. Route between BILAT and BRAVO is unidirectional.
▲ JUNIA 210002.5N 0694459.2E	271/190 98NM					
▲ BILAT 205825.6N 0680000.1E	271 92NM			↓		
▲ BRAVO 205647.7N 0662130.8E						
W104 (LENGPUI -APAGO)						
▲ LENGPUI VOR (LLP) 234949.6N 0923722.4E	180/360 98NM	F460/F100 7500Ft Class E	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation is applicable.

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ APAGO 221211.0N 0923857.5E						2. Lengpui VOR (LLP) - APAGO segment may be treated as east-bound and APAGO - Lengpui VOR (LLP) may be treated as west-bound.
						3. Guwahati ACC 123.9MHz 4. Kolkata ACC 120.1MHz, 126.1MHz
W105 (PATNA - BAGHDOGRA)						
▲ PATNA VOR (PPT) 253525.5N 0850523.7E	090/271 63NM	F280/F085 1700Ft Class E	20NM	↓	↑	1. Outside CTA & CTR, Class E airspace 2. Patna APP 118.3Mhz, 121.1MHz 3. Kolkata ACC 120.1MHz, 126.1Mhz, 125.9MHz
▲ UXAGA 253504.5N 0861509.2E	090/271 16NM			↓	↑	
▲ TAXOP 253459.3N 0863313.9E	091/271 54NM	F280/F085 1700Ft Class E				
▲ KATIHAR NDB (KH) 253401.7N 0873320.6E	033/213 38NM			↓	↑	
▲ KISHANGANJ NDB (KG) 260604.5N 0875630.3E	031/211 41NM	F280/F085 6200Ft Class E				
▲ BAGHDOGRA VOR (BBD) 264126.1N 0881935.2E						
W106 (PATNA - RANCHI)						
▲ PATNA VOR (PPT) 253525.5N 0850523.7E	189/009 52NM	F250/F075 2300Ft Class E		↑	↓	1. Patna APP 118.3MHz, 121.1MHz 2. Gaya TWR 123.5MHz 3. When VED57 is active, aircraft to follow route W106A. 4. Ranchi TWR 122.3MHz 5. Kolkata ACC 120.1MHz, 126.1MHz, 125.9MHz
▲ GAYA VOR (GGC) 244430.8N 0845637.9E	167/347 89NM	F250/F075 5200Ft Class E	20NM			
▲ RANCHI VOR (RRC) 231831.3N 0851935.8E				↑	↓	
W106A (PATNA - RANCHI)						
▲ PATNA VOR (PPT) 253525.5N 0850523.7E	189/009 52NM	F250/F075 2300Ft Class E	20NM	↑	↓	1. Patna APP 118.3MHz, 121.1MHz

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ GAYA VOR (GGC) 244430.8N 0845637.9E	229/049 32NM	F250/F075 3400Ft Class E	20NM	↑	↓	2. Gaya TWR 123.5MHz 3. Ranchi TWR 122.3MHz 4. Kolkata ACC 120.1MHz, 126.1MHz, 125.9MHz
▲ EXUNA 242305.9N 0842952.1E	145/326 79NM	F250/F075 3900Ft Class E		↑	↓	
▲ RANCHI VOR (RRC) 231831.3N 0851935.8E				↑	↓	
W108 [WEST BOUND] (DELHI - AMRITSAR)						
▲ DELHI VOR (DPN) 283400.2N 0770541.5E	297 94NM	F195/F125 2700Ft Class D	20NM		↓	1. All Aircraft to Contact "A" monitor on 119.7mhz for identification.
▲ OROTI 291659.9N 0752956.3E	346 45NM	F195/F125 1900Ft Class E	20NM		↓	2. Aircraft when between OROTI and Amritsar VOR (AAR); to contact Halwara TWR on 122.7MHz for traffic information. 3. Airspace bounded by coordinates - 2952N 07551E, 2943N 07555E, 2933N 07519E, 2942N 07518E between FL100 to FL120 reserved for IAF aircraft crossing the ATS route. 4. Delhi ACC 124.55MHz, 124.2MHz 5. Amritsar TWR 124.35MHz, 119.7MHz
▲ UXIDA 300059.6N 0751756.3E	345 48NM				↓	
▲ BOLUX 304714.3N 0750426.4E	345 57NM	F195/F125 2400Ft Class D			↓	
▲ AMRITSAR VOR (AAR) 314225.0N 0744803.0E					↓	
W108 [EAST BOUND] (AMRITSAR - DELHI)						
▲ AMRITSAR VOR (AAR) 314225.0N 0744803.0E	165 57NM	F195/F125 2400Ft Class E	20NM		↑	1. All aircraft to contact 'A' Monitor on 119.7MHz for identification. 2. Aircraft when between UXIDA and Amritsar VOR (AAR); to contact Halwara TWR on 122.7MHz for traffic information. 3. Airspace bounded by coordinates - 2952N 07551E, 2943N 07555E, 2933N 07519E, 2942N 07518E between FL100 to FL120 reserved for IAF aircraft crossing the ATS route. 4. Delhi ACC 124.55MHz, 124.2MHz 5. Amritsar TWR 124.35MHz, 119.7MHz
▲ BOLUX 304714.3N 0750426.4E	165 48NM	F195/F125 1900Ft Class D			↑	
▲ UXIDA 300059.6N 0751756.3E	132 128NM	F195/F125 2700Ft Class D			↑	
▲ DELHI VOR (DPN) 283400.2N 0770541.5E					↑	

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
W109 (WEST BOUND) (DELHI - PATHANKOT)						
▲ DELHI VOR (DPN) 283400.2N 0770541.5E	297 94NM	F195/F125 2700Ft Class D	20NM		↓	1. All aircraft to contact 'A' Monitor on 119.7MHz for identification. 2. Aircraft when between OROTI and Pathankot NDB (PK); to contact Halwara TWR on 122.7MHz for traffic information. 3. Airspace bounded by coordinates - 2952N 07551E, 2943N 07555E, 2933N 07519E, 2942N 07518E between FL100 to FL120 reserved for IAF aircraft crossing the ATS route. 4. Delhi ACC 124.55MHz, 124.2MHz
▲ OROTI 291659.9N 0752956.3E	346 45NM	F195/F125 1900Ft Class E				
▲ UXIDA 300059.6N 0751756.3E	345 48NM					
▲ BOLUX 304714.3N 0750426.4E	017 92NM	F195/F125 2500Ft Class E				
▲ PATHANKOT NDB (PK) 321425.8N 0753759.0E		F195/F125 2500Ft Class E	20NM		↓	
W109 (EAST BOUND) (PATHANKOT - DELHI)						
▲ PATHANKOT NDB (PK) 321425.8N 0753759.0E	165 57NM	F195/F125 2400Ft Class E	20NM		↓	1. All aircraft to contact 'A' Monitor on 119.7MHz for identification. 2. Aircraft when between UXIDA and Pathankot NDB (PK); to contact Halwara TWR on 122.7MHz for traffic information.
▲ BOLUX 304714.3N 0750426.4E	165 48NM	F195/F125 1900Ft Class D				
▲ UXIDA 300059.6N 0751756.3E	132 128NM	F195/F125 2700Ft Class D			↓	3. Airspace bounded by coordinates - 2952N 07551E, 2943N 07555E, 2933N 07519E, 2942N 07518E between FL100 to FL120 reserved for IAF aircraft crossing the ATS route. 4. Delhi ACC 124.55MHz, 124.2MHz
▲ DELHI VOR (DPN) 283400.2N 0770541.5E						
W110 (BARAPANI - ATOGA)						
▲ BARAPANI VOR (BPN) 254223.4N 0915843.3E	257/076 26NM	F460/F100 9000Ft Class D	20NM		↑ ↓	1. Barapani TWR 122.3MHz 2. Guwahati ACC 123.9MHz
▲ POLOT 253601.9N 0913003.8E	257/076 83NM	F460/F100 1900Ft Class D				

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ ATOGA 251601.9N 0900101.5E		F460/F100 1900Ft Class D	20NM	↑	↓	
W111 (KOLKATA - PORT BLAIR)						
▲ KOLKATA VOR (CEA) 223842.6N 0882710.4E	159/339 112NM	F460/F290 1800Ft Class D	20NM	↑	↓	1. Kolkata ACC 120.7MHz, 125.9MHz, 132.45MHz 2. Chennai OCC 5670KHz, 2872KHz, 5683KHz, 3318KHz, 6655KHz, 8861KHz, 8909KHz
▲ DOPID 205503.2N 0891216.1E	180/361 371NM	F460/F290 1500Ft Class E				
▲ VATLA 144404.9N 0891850.4E	135/316 273NM	F460/F290 2700Ft Class E				
▲ PORT BLAIR VOR (PPB) 1138258.8N 0924445.1E		F460/F290 2700Ft Class E	20NM	↑	↓	
W112 (KOLKATA - PORT BLAIR)						
▲ KOLKATA VOR (CEA) 223842.6N 0882710.4E	159/339 112NM	F280/F075 1800Ft Class D		↑	↓	1. Kolkata ACC 120.7MHz, 125.9MHz, 132.45MHz 2. Chennai OCC 5670KHz, 2872KHz, 5683KHz, 3318KHz, 6655KHz, 8861KHz, 8909KHz
▲ DOPID 205503.2N 0891216.1E	161/343 592NM	F280/F075 2700Ft Class E				
▲ PORT BLAIR VOR (PPB) 113858.8N 0924445.1E						
W113 [East Bound] (RAIPUR - BHUBANESWAR)						
▲ RAIPUR VOR (RRP) 211047.8N 0814433.5E	071 55NM	F270/F075 3500Ft Class E	20NM	↓	↓	1. Track guidance east of OGUNA with respect to Bhubaneswar VOR (BBS) and west of OGUNA with respect to Raipur VOR (RRP). 2. Kolkata ACC 120.7MHz, 125.9MHz, 132.45MHz 3. Bhubaneswar TWR 125.15MHz 4. Raipur TWR 122.3MHz
▲ OGUNA 212925.8N 0823945.2E	113 191NM	F270/F075 4800Ft Class E				
▲ BHUBANESWAR VOR (BBS) 201437.2N 0854846.7E						
W113 [West Bound] (BHUBANESWAR - RAIPUR)						

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ BHUBANESWAR VOR (BBS) 201437.2N 0854846.7E	279 162NM	F270/F075 4800Ft Class E	20NM		↓	1. Track guidance east of OPASA with respect to Bhubaneswar VOR (BBS) and west of OGUNA with respect to Raipur VOR (RRP). 2. Kolkata ACC 120.7MHz, 125.9MHz, 132.45MHz 3. Bhubaneswar TWR 125.15MHz 4. Raipur TWR 122.3MHz
▲ OPASA 203503.0N 0825723.0E	280 57NM					
▲ IKOSI 204302.9N 0815653.5E	339 30NM					
▲ RAIPUR VOR (RRP) 211047.8N 0814433.5E		F270/F075 3100Ft Class E				
W114 (CHENNAI - COIMBATORE)						
▲ CHENNAI VOR (MMV) 125936.1N 0801014.5E	249/067 30NM	F460/F110 6500Ft Class D	20NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Chennai ACC 118.9MHz, 125.3MHz 3. Bangalore APP 127.7MHz 4. Coimbatore APP 122.3MHz
▲ KANCHIPURAM VOR (KKP) 124715.1N 0794244.7E	239 189NM					
▲ COIMBATORE VOR (CCB) 110201.6N 0770253.0E						
W115 (COIMBATORE - KANCHIPURAM)						
▲ COIMBATORE VOR (CCB) 110201.6N 0770253.0E	075 94NM	F460/F110 6000Ft Class D	20NM	↓	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Bangalore APP 127.7MHz 3. Chennai ACC 118.9MHz, 125.3MHz 4. Coimbatore APP 122.3MHz 5. Trivandrum ACC 125.95MHz, 120.9MHz
▲ XILAS 113105.5N 0783355.3E	044 102NM	F460/F110 7500Ft Class D				
▲ KANCHIPURAM VOR (KKP) 124715.1N 0794244.7E		F460/F110 7500Ft Class D				
W116 (BANGALORE - CHENNAI)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	111 45NM	F460/F110 6000Ft Class D	20NM	↓	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Chennai ACC 118.9MHz, 125.3MHz 3. Bangalore APP 121.25MHz, 127.75MHz.
▲ TEBAM 125758.1N 0782751.3E	091 100NM					

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ CHENNAI VOR (MMV) 125936.1N 0801014.5E		F460/F110 6000Ft Class D			↓	
W117 (CHENNAI - BANGALORE)						
▲ CHENNAI VOR (MMV) 125936.1N 0801014.5E	286 75NM	F460/F110 6000Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Chennai ACC 118.9MHz, 125.3MHz 3. Bangalore APP 121.25MHz, 127.75MHz.
▲ XIVIL 131739.68N 0785504.01E	268 70NM					
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E						
W118 SOUTH BOUND (BANGALORE - COCHIN INTERNATIONAL)						
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E	190 69NM	F460/F110 7800Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Bangalore APP 121.25MHz, 127.75MHz. 3. Aircraft shall contact HAL ATC before entering VOR181 A & C on 127.7MHz, 122.7MHz. 4. Coimbatore APP 122.3MHz. 5. Cochin Intl. APP 119.75MHz. 6. Trivandrum ACC 125.95MHz, 120.9MHz. 7. . Route Bi directional between CCB and CIA VOR.
▲ APGUN 120339.94N0773457.76E	209 69NM	F460/F110 7800Ft Class D				
▲ COIMBATORE VOR (CCB) 110201.6N 0770253.0E	220/040 66NM	F460/F110 6900Ft Class D				
▲ COCHIN INTERNATIONAL VOR (CIA) 100901.8N 0762221.3E						
W118 NORTH BOUND (COCHIN INTERNATIONAL-BANGALORE)						
▲ COCHIN INTERNATIONAL VOR (CIA) 100901.8N 0762221.3E	040/220 66NM	F460/F110 6900Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Bangalore APP 121.25MHz, 127.75MHz. 3. Aircraft shall contact HAL ATC before entering VOR181 B & C on 127.7MHz, 122.7MHz. 4. Coimbatore APP 122.3MHz. 5. Cochin Intl. APP 119.75MHz. 6. Trivandrum ACC 125.95MHz, 120.9MHz. 7. . Route Bi directional between CCB and CIA VOR.
▲ COIMBATORE VOR (CCB) 110201.6N 0770253.0E	014 68NM	F460/F110 7800Ft Class D				
▲ UGABA 120859.14N 0771729.41E	025 68NM	F460/F110 7800Ft Class D				

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E		F460/F110 7800Ft Class D	20NM	↓	↑	
W119 (CALICUT - COIMBATORE)						
▲ CALICUT VOR (CLC) 110805.5N 0755717.5N	098/278 65NM	F460/F110 9600Ft Class D	20NM	↓		1. Minimum 10 Min. longitudinal separation applicable. 2. Calicut TWR 123.5MHz, 122.95MHz 3. Coimbatore APP 122.3MHz 4. Trivandrum ACC 125.95MHz, 120.9MHz, 119.75MHz
▲ COIMBATORE VOR (CCB) 110201.6N 0770253.0E		F460/F110 9600Ft Class D			↑	
W120 (VIKARABAD - GOA)						
▲ VIKARABAD NDB (VB) 172003.8N 0775255.5E	244/063 123NM	F270/F160 3500Ft Class E	20NM	↑	↓	1. Hyderabad ACC 118.3MHz /129.7MHz 2. Chennai ACC 118.9MHz/125.3MHz 3. Chennai RCAG 126.5MHz 4. Mumbai ACC 125.35MHz/132.7MHz/120.5MHz 5. GOA APP 119.7MHz
▲ BOGAT 162134.0N0755956.4E	251/071 085NM	F270/F160 4900Ft Class E				
▲ BELGAUM VOR (BBM) 155122.2N0743701.0E	241/060 055NM	F270/F160 5100Ft Class E		↑	↓	
▲ GOA VOR (GGO) 152247.3N 0734845.4E						
W121 (MANGALORE - BANGALORE)						
▲ MANGALORE VOR (MML) 125743.0N 0745517.9E	032/211 76NM	F200/F090 6100Ft Class D	20NM	↓		1. Outside CTR and CTA, Class 'E' airspace. 2. Minimum 10 Min. longitudinal separation applicable. 3. Mangalore ACC 127.55MHz, 128.7MHz. 4. Bangalore APP 121.25MHz, 127.75MHz.
▲ GUNIM 140204.7N 0753256.6E	065/245 42NM	F200/F090 4500Ft Class E	20NM		↑	
▲ UNSAL 142404.6N 0760956.3E	080/260 55NM	F200/F090 4400Ft Class E		↓		
▲ OPAMO 143534.6N 0770525.9E	158/338 91NM	F200/F105 6800Ft Class D			↑	

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ BANGALORE VOR (BIA) 131223.39N 0774351.25E		F200/F105 6800Ft Class D	20NM	↓	↑	
W122 [North Bound] (BHOPAL – JAIPUR)						
▲ Bhopal VOR (BPL) 231657.9N 0772009.6E	315 118NM	F280/F075 3400Ft Class D	20NM		↓	1. Minimum 10 Min. longitudinal separation applicable based on Mach number technique.
▲ EPDAD 243830.1N 0754730.6E	360 131NM	F280/F075 3500Ft Class D				
▲ JAIPUR VOR (JJP) 264930.7N 0754801.2E						
W122 [South Bound] (JAIPUR – KALNA)						
▲ JAIPUR VOR (JJP) 264930.7N 0754801.2E	150 64NM	F460/F075 3700Ft Class D	20NM	↓		1. Minimum 10 Min. longitudinal separation applicable based on Mach number technique.
▲ KALNA 255417.1N 0762355.9E						
W123 (JAIPUR – AGRA)						
▲ JAIPUR VOR (JJP) 264930.7N 0754801.2E	076/256 98NM	F460/F085 3500Ft	20NM	↓	↑	1. Minimum 10 Min. longitudinal separation applicable based on Mach number technique.
▲ POSIG 271300.6N 0773455.3E	101/281 21NM	F460/F085 3400Ft Class D				
▲ AGRA VOR (AGG) 270900.7N 0775755.1E						
W124 (UKBAB – JAIPUR)						
▲ UKBAB 261146.5N 0745445.6E	052 61NM	F460/F075 3500Ft Class D	20NM	↓		1. Minimum 10 Min. longitudinal separation applicable based on Mach number technique.

Route Designator (RNP Type) Name of Significant Points Coordinates	Track- Magnetic/Geo VOR Radial Distance COP	Upper Limit Lower Limit MFA Airspace Classification	Lateral Limits	Direction of Cruising Levels		Remarks Controlling Unit Frequency
				Odd	Even	
▲ JAIPUR VOR (JJP) 264930.7N 0754801.2E				↓		2. Jaipur App 123.5MHz. 3. Delhi ACC 124.55MHz, 124.2MHz. 4. Route is available for international flights landing at Jaipur.
W126 (HUBLI – MUMBAI)						
▲ HUBLI NDB (HB) 152130.3N 0750500.8E	320/140 40NM	F200/F100 4400FT	20NM	↑	↓	1. MUMBAI ACC 125.35MHZ , 132.7MHZ, 120.5MHZ 2. ROUTE IS BIDIRECTIONAL BETWEEN HUBLI & BELGAUM
▲ BELGAUM VOR (BBM) 155122.2N 0743701.0E	337 68NM	F200/F100 4800FT CLASS D		↑		
▲ EPKOS 165307.9N 0740713.2E	333 87NM	F200/F100 6400FT CLASS D		↑		
▲ MOLGO 180937.56N 0732306.26E	334 62NM	F200/F100 6400FT CLASS D	20NM	↑		
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E						
W218 (HYDERABAD - MUMBAI)						
▲ HYDERABAD VOR (HIA) 171340.1N 0782420.9E	275/095 92NM	F240/F075 3900Ft Class D	20NM	↑	↓	1. Minimum 10 Min. longitudinal separation applicable. 2. Outside CTA, CTR, Class 'E' airspace. 3. Hyderabad ACC 128.35MHz, 120.95MHz. 4. Mumbai ACC 132.7MHz, 120.5Mhz
▲ GULBARGA VOR (GGB) 171848.8N 0764811.0E	334/153 46NM			↑	↓	
▲ APUSU (VABF/VOMF FIR) 180003.6N 0762544.1E	333/153 102NM			↑	↓	
▲ MELAX 192955.1N 0753756.5E	277/097 60NM	F240/F075 3600Ft Class D		↑	↓	
▲ OPAKA 193621.0N 0743258.0E	253/073 100NM	F240/F075 6200Ft Class D		↑	↓	
▲ MUMBAI VOR (BBB) 190507.4N 0725231.3E				↑	↓	