

## ENR 4 无线电导航设施 / 系统 RADIO NAVIGATION AIDS/SYSTEMS

## ENR 4.1 航路无线电导航设施 RADIO NAVIGATION AIDS—EN-ROUTE

| 导航设施名称<br>Name of Aid | 设施类别<br>Types of Aid | 识别<br>ID | 频率<br>波道<br>Frequency<br>Channel | 工作时间<br>Hours of<br>operation | 坐标<br>Coordinates         | DME<br>天线标高<br>ELEV of<br>DME<br>antenna | 备注<br>Remarks                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 阿克苏<br>Aksu           | VOR/DME              | AKS      | 115.1MHz<br>CH 98X               | H24                           | N41° 15.7'<br>E080° 17.1' | 1 185m                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 阿勒泰<br>Altay          | VOR/DME              | TAI      | 114.3MHz<br>CH 90X               | H24                           | N47° 44.8'<br>E088° 05.0' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 庵东<br>Andong          | VOR/DME              | AND      | 114.8MHz<br>CH 95X               | H24                           | N30° 15.4'<br>E121° 13.3' | 5m                                       | See ZSNB,ZSPD AD2.19                                                                                                                                                                                                                                                                                                                                                                                                           |
| 安康<br>Ankang          | NDB                  | UF       | 290kHz                           | H24                           | N32° 43.8'<br>E108° 49.4' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 柏鹤寺<br>Baiheshi       | VOR/DME              | BHS      | 117.9MHz<br>CH 126X              | H24                           | N30° 30.7'<br>E104° 12.0' |                                          | See ZUUU AD2.19                                                                                                                                                                                                                                                                                                                                                                                                                |
| 邦达<br>Bangda          | VOR/DME              | DCH      | 113.3MHz<br>CH 80X               | H24                           | N30° 31.3'<br>E097° 08.5' | 4 322m                                   | R005° -R100° clock-<br>wise, R180° -R300°<br>clockwise, beyond 22NM<br>on R003° and R097° ,<br>beyond 8NM on R258°<br>U/S.                                                                                                                                                                                                                                                                                                     |
| 半塔集<br>Bantaji        | NDB                  | OF       | 340kHz                           | H24                           | N32° 40.4'<br>E118° 34.7' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 抱龙<br>Baolong         | NDB                  | WL       | 426kHz                           | H24                           | N18° 29.3'<br>E109° 24.2' |                                          | See ZJSY AD2.19                                                                                                                                                                                                                                                                                                                                                                                                                |
| 包头<br>Baotou          | VOR/DME              | BAV      | 117.3MHz<br>CH 120X              | H24                           | N40° 33.4'<br>E109° 59.9' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 奔牛<br>Benniu          | NDB                  | ZJ       | 217kHz                           | H24                           | N31° 56.5'<br>E119° 42.6' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 百色<br>Bose            | VOR/DME              | BSE      | 115.9MHz<br>CH 106X              | H24                           | N23° 53.5'<br>E106° 38.7' |                                          | For VOR/DME: R175° -<br>R255° clockwise, R345°<br>-R085° clockwise (ex-<br>cept R005° , R049° ) U/<br>S.<br>For VOR: Beyond 35NM<br>on R049° , R097° -R103°<br>clockwise, beyond<br>28NM (beyond 48NM at<br>ALT4200m) on R135° U/<br>S.<br>For DME: Beyond 32NM<br>at ALT6300m on R005° ,<br>BTN 5-14NM and beyond<br>22NM on R049° , BTN<br>13-42NM on R095° , be-<br>yond 32NM (beyond<br>60NM at ALT4200m) on<br>R135° U/S. |
| 岑村<br>Cencun          | VOR/DME              | CEN      | 114.6MHz<br>CH 93X               | H24                           | N23° 09.1'<br>E113° 25.0' | 108m                                     | See ZGGG AD2.19                                                                                                                                                                                                                                                                                                                                                                                                                |

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|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|-------------------------------------------------------------------------------------|
| 茶庵<br>Cha'an          | VOR/DME              | HFC      | 111.8MHz<br>CH 55X               | H24                           | N32° 04.8'<br>E116° 46.1' | 47m                                      | See ZSOF AD2.19                                                                     |
| 昌北<br>Changbei        | VOR/DME              | NCH      | 115.1MHz<br>CH 98X               | H24                           | N28° 53.1'<br>E115° 54.7' | 43m                                      | See ZSCN AD2.19                                                                     |
| 常德<br>Changde         | NDB                  | CD       | 225kHz                           | H24                           | N28° 50.9'<br>E111° 37.3' |                                          |                                                                                     |
| 昌都<br>Changdu         | NDB                  | RG       | 247kHz                           | H24                           | N31° 08.8'<br>E097° 10.6' |                                          | BTN 9-12NM on BRG 059<br>° U/S.                                                     |
| 长海<br>Changhai        | VOR/DME              | CHI      | 116.8MHz<br>CH 115X              | H24                           | N39° 16.0'<br>E122° 37.0' |                                          |                                                                                     |
| 长生桥<br>Changshengqiao | VOR/DME              | SHC      | 111.0MHz<br>CH 47X               | H24                           | N29° 25.9'<br>E106° 43.7' | 500m                                     | See ZUCK AD2.19                                                                     |
| 长武<br>Changwu         | NDB                  | HO       | 375kHz                           | H24                           | N35° 12.6'<br>E107° 46.1' |                                          | Within 28NM on BRG 315<br>° and within 58NM on<br>BRG 316° U/S.                     |
| 长治<br>Changzhi        | NDB                  | SQ       | 398kHz                           | H24                           | N36° 14.4'<br>E113° 07.0' |                                          |                                                                                     |
| 朝阳<br>Chaoyang        | VOR/DME              | CHG      | 114.5MHz<br>CH 92X               | H24                           | N41° 32.2'<br>E120° 26.0' |                                          |                                                                                     |
| 车道峪<br>Chedaoyu       | NDB                  | CDY      | 292kHz                           | H24                           | N40° 34.7'<br>E117° 13.4' |                                          |                                                                                     |
| 成都<br>Chengdu         | NDB                  | ZW       | 260kHz                           | H24                           | N30° 30.0'<br>E103° 54.5' |                                          | See ZUUU AD2.19                                                                     |
| 程海<br>Chenghai        | VOR/DME              | CEH      | 113.4MHz<br>CH 81X               | H24                           | N26° 39.9'<br>E100° 43.2' | 2 629m                                   | See ZPLJ AD2.19                                                                     |
| 崇州<br>Chongzhou       | VOR/DME              | CZH      | 114.5MHz<br>CH 92X               | H24                           | N30° 38.7'<br>E103° 41.2' |                                          | See ZUUU AD2.19                                                                     |
| 从化<br>Conghua         | VOR/DME              | CON      | 113.0MHz<br>CH 77X               | H24                           | N23° 35.3'<br>E113° 35.2' | 77m                                      | See ZGGG AD2.19                                                                     |
| 大虎山<br>Dahushan       | VOR/DME              | DHN      | 116.5MHz<br>CH 112X              | H24                           | N41° 38.7'<br>E122° 06.9' |                                          |                                                                                     |
| 大理<br>Dali            | VOR/DME              | DAL      | 112.6MHz<br>CH 73X               | H24                           | N25° 38.6'<br>E100° 19.4' |                                          | For DME: R065° -R107<br>° clockwise ,beyond<br>20NM below QNH3600m<br>on R020° U/S. |
| 大连<br>Dalian          | VOR/DME              | DBL      | 115.4MHz<br>CH 101X              | H24                           | N38° 57.7'<br>E121° 34.2' | 59m                                      | See ZYTL AD2.19                                                                     |
| 丹东<br>Dandong         | VOR/DME              | DDG      | 113.9MHz<br>CH 86X               | H24                           | N40° 15.4'<br>E124° 17.0' |                                          |                                                                                     |
| 党家庄<br>Dangjiazhuang  | NDB                  | DP       | 226kHz                           | H24                           | N36° 46.4'<br>E117° 22.2' |                                          | See ZSJD AD2.19                                                                     |
| 党山<br>Dangshan        | VOR/DME              | DSH      | 117.3MHz<br>CH 120X              | H24                           | N30° 08.9'<br>E120° 30.1' | 13m                                      | See ZSHC AD2.19                                                                     |
| 大榕江<br>Darongjiang    | NDB                  | VQ       | 398kHz                           | H24                           | N25° 33.7'<br>E110° 28.6' |                                          | See ZGKL AD2.19                                                                     |

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|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|-----------------|
| 大托铺<br>Datuopu        | NDB                  | ZK       | 520kHz                           | H24                           | N28° 01.1'<br>E112° 57.8' |                                          |                 |
| 大王庄<br>Dawangzhuang   | VOR/DME              | VYK      | 112.7MHz<br>CH 74X               | H24                           | N39° 11.7'<br>E116° 34.3' |                                          |                 |
| 磴口<br>Dengkou         | VOR/DME              | DKO      | 113.5MHz<br>CH 82X               | H24                           | N40° 18.9'<br>E106° 59.8' |                                          |                 |
| 德新<br>Dexin           | VOR/DME              | CDX      | 116.35MHz<br>CH 110Y             | H24                           | N31° 15.0'<br>E104° 22.8' | 540m                                     | See ZUUU AD2.19 |
| 东木栏头<br>Dongmulantou  | VOR/DME              | MLT      | 112.7MHz<br>CH 74X               | H24                           | N20° 09.1'<br>E110° 40.4' | 58m                                      | See ZJHK AD2.19 |
| 东山<br>Dongshan        | VOR/DME              | DST      | 109.2MHz<br>CH 29X               | H24                           | N27° 45.0'<br>E120° 37.8' | 39m                                      | See ZSWZ AD2.19 |
| 东羊角<br>Dongyangjiao   | NDB                  | PU       | 296kHz                           | H24                           | N41° 30.4'<br>E123° 17.5' |                                          | See ZYTX AD2.19 |
| 东营<br>Dongying        | VOR/DME              | DYN      | 114.0MHz<br>CH 87X               | H24                           | N37° 31.7'<br>E118° 47.2' |                                          |                 |
| 敦煌<br>Dunhuang        | VOR/DME              | DNH      | 115.5MHz<br>CH 102X              | H24                           | N40° 09.8'<br>E094° 50.7' | 1 122m                                   | See ZLDH AD2.19 |
| 额济纳旗<br>Ejinaqi       | VOR/DME              | JNQ      | 112.7MHz<br>CH 74X               | H24                           | N41° 59.4'<br>E101° 03.0' | 949m                                     |                 |
| 恩施<br>Enshi           | VOR/DME              | ENH      | 114.7MHz<br>CH 94X               | H24                           | N30° 17.5'<br>E109° 36.1' |                                          |                 |
| 二连浩特<br>Erenhot       | VOR/DME              | LHT      | 112.5MHz<br>CH 72X               | H24                           | N43° 24.8'<br>E112° 07.6' |                                          |                 |
| 二塘<br>Ertang          | NDB                  | QP       | 213kHz                           | H24                           | N24° 40.2'<br>E110° 46.6' |                                          |                 |
| 富家场<br>Fujiachang     | VOR/DME              | FJC      | 113.9MHz<br>CH 86X               | H24                           | N29° 55.7'<br>E104° 18.2' |                                          | See ZUUU AD2.19 |
| 阜康<br>Fukang          | VOR/DME              | FKG      | 116.3MHz<br>CH 110X              | H24                           | N44° 10.4'<br>E087° 59.0' |                                          | See ZWWW AD2.19 |
| 涪陵<br>Fuling          | VOR/DME              | FLG      | 114.0MHz<br>CH 87X               | H24                           | N29° 42.0'<br>E107° 22.7' |                                          | See ZUCK AD2.19 |
| 福清<br>Fuqing          | VOR/DME              | FQG      | 117.4MHz<br>CH 121X              | H24                           | N25° 44.4'<br>E119° 23.1' |                                          | See ZSFZ AD2.19 |
| 阜阳<br>Fuyang          | VOR/DME              | FYG      | 112.9MHz<br>CH 76X               | H24                           | N32° 53.0'<br>E115° 43.8' |                                          |                 |
| 扶余<br>Fuyu            | VOR/DME              | FYU      | 113.7MHz<br>CH 84X               | H24                           | N44° 54.7'<br>E124° 48.2' |                                          |                 |
| 富蕴<br>Fuyun           | VOR/DME              | XFY      | 114.7MHz<br>CH 94X               | H24                           | N46° 47.7'<br>E089° 32.4' | 938m                                     |                 |
| 福州<br>Fuzhou          | VOR/DME              | FOC      | 116.8MHz<br>CH 115X              | H24                           | N25° 56.6'<br>E119° 39.8' |                                          | See ZSFZ AD2.19 |
| 高栏<br>Gaolan          | NDB                  | UJ       | 204kHz                           | H24                           | N21° 55.2'<br>E113° 17.6' |                                          | See ZGSZ AD2.19 |

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|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|----------------------------------------------------------------------|
| 高要<br>Gaoyao          | VOR/DME              | GYA      | 116.5MHz<br>CH 112X              | H24                           | N23° 04.2'<br>E112° 29.2' |                                          | See ZGGG AD2.19                                                      |
| 耿马<br>Gengma          | VOR/DME              | GMA      | 114.7MHz<br>CH 94X               | H24                           | N23° 31.7'<br>E099° 24.5' | 1 147m                                   | R150° -R215° clock-<br>wise U/S.                                     |
| 观澜<br>Guanlan         | VOR/DME              | GLN      | 112.0MHz<br>CH 57X               | H24                           | N22° 42.5'<br>E114° 02.0' |                                          | See ZGSZ AD2.19                                                      |
| 贵阳<br>Guiyang         | VOR/DME              | KWE      | 114.3MHz<br>CH 90X               | H24                           | N26° 31.4'<br>E106° 47.7' | 1 178m                                   | See ZUGY AD2.19                                                      |
| 谷塘<br>Gutang          | NDB                  | W        | 388kHz                           | H24                           | N28° 13.1'<br>E113° 13.0' |                                          | See ZGHA AD2.19                                                      |
| 固原<br>Guyuan          | VOR/DME              | GUY      | 112.6MHz<br>CH 73X               | H24                           | N36° 04.8'<br>E106° 12.9' | 1 735m                                   |                                                                      |
| 海拉尔<br>Hailar         | VOR/DME              | HLD      | 115.1MHz<br>CH 98X               | H24                           | N49° 12.2'<br>E119° 49.3' | 667m                                     | See ZBLA AD2.19                                                      |
| 海青<br>Haiqing         | NDB                  | IJ       | 394kHz                           | H24                           | N47° 52.1'<br>E134° 38.7' |                                          | Bearing 130° -060°<br>clockwise, within 27NM<br>on bearing 081° U/S. |
| 杭州<br>Hangzhou        | VOR/DME              | HGH      | 113.0MHz<br>CH 77X               | H24                           | N30° 14.4'<br>E120° 27.7' | 13m                                      | See ZSHC AD2.19                                                      |
| 哈尔滨<br>Harbin         | VOR/DME              | HRB      | 112.5MHz<br>CH 72X               | H24                           | N45° 37.6'<br>E126° 15.6' | 136m                                     | See ZYHB AD2.19                                                      |
| 荷苞湖<br>Hebaohu        | VOR/DME              | DHB      | 114.45MHz<br>CH 91Y              | H24                           | N30° 41.9'<br>E113° 58.3' | 100m                                     | See ZHHH AD2.19                                                      |
| 黑河<br>Heihe           | VOR/DME              | HEK      | 114.0MHz<br>CH 87X               | H24                           | N50° 10.1'<br>E127° 18.6' |                                          | R330° -R190° clock-<br>wise U/S.                                     |
| 河口<br>Hekou           | VOR/DME              | HOK      | 116.0MHz<br>CH 107X              | H24                           | N31° 19.5'<br>E114° 25.8' |                                          |                                                                      |
| 合流水<br>Heliushui      | NDB                  | DS       | 250kHz                           | H24                           | N30° 12.0'<br>E106° 50.9' |                                          | See ZUCK AD2.19                                                      |
| 横沙<br>Hengsha         | VOR/DME              | HSB      | 114.4MHz<br>CH 91X               | H24                           | N31° 22.1'<br>E121° 50.8' |                                          | See ZSPD AD2.19                                                      |
| 衡水<br>Hengshui        | NDB                  | HG       | 350kHz                           | H24                           | N37° 43.0'<br>E115° 42.3' |                                          |                                                                      |
| 河西<br>Hexi            | NDB                  | SB       | 319kHz                           | H24                           | N27° 44.4'<br>E102° 09.9' |                                          | See ZUXC AD2.19                                                      |
| 呼和浩特<br>Hohhot        | VOR/DME              | HET      | 116.9MHz<br>CH 116X              | H24                           | N40° 43.5'<br>E111° 54.0' | 1 095m                                   | See ZBHH AD2.19                                                      |
| 和田<br>Hotan           | VOR/DME              | HTN      | 113.1MHz<br>CH 78X               | H24                           | N37° 02.2'<br>E079° 52.1' | 1 428m                                   | See ZWTN AD2.19                                                      |
| 淮安<br>Huaian          | VOR/DME              | HUN      | 113.3MHz<br>CH 80X               | H24                           | N33° 46.4'<br>E119° 06.6' | 18m                                      | See ZSSH AD2.19                                                      |
| 怀来<br>Huailai         | NDB                  | KM       | 360kHz                           | H24                           | N40° 23.3'<br>E115° 29.8' |                                          |                                                                      |
| 怀柔<br>Huairou         | VOR/DME              | HUR      | 113.6MHz<br>CH 83X               | H24                           | N40° 19.8'<br>E116° 44.9' | 62m                                      | See ZBAA AD2.19                                                      |

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|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|---------------------------------------------|
| 黄城<br>Huangcheng      | VOR/DME              | HCH      | 116.1MHz<br>CH 108X              | H24                           | N37° 39.3'<br>E120° 32.6' |                                          | For DME: Beyond 26NM<br>on R075° U/S.       |
| 黄平<br>Huangping       | VOR/DME              | KHP      | 113.4MHz<br>CH 81X               | H24                           | N26° 58.4'<br>E107° 59.5' | 943m                                     |                                             |
| 黄山<br>Huangshan       | VOR/DME              | TXN      | 116.1MHz<br>CH 108X              | H24                           | N29° 44.3'<br>E118° 15.2' | 141m                                     | See ZSTX AD2.19                             |
| 花垣<br>Huayuan         | VOR/DME              | HUY      | 112.0MHz<br>CH 57X               | H24                           | N28° 34.8'<br>E109° 27.0' |                                          |                                             |
| 湖光<br>Huguang         | NDB                  | LH       | 356kHz                           | H24                           | N21° 08.1'<br>E110° 20.0' |                                          |                                             |
| 回龙<br>Huilong         | VOR/DME              | HLC      | 115.95MHz<br>CH 106Y             | H24                           | N30° 18.1'<br>E103° 41.7' | 567m                                     | See ZUUU AD2.19                             |
| 佳木斯<br>Jiamusi        | VOR/DME              | JMU      | 113.5MHz<br>CH 82X               | H24                           | N46° 50.5'<br>E130° 27.9' | 88m                                      | See ZYJM AD2.19                             |
| 江北<br>Jiangbei        | VOR/DME              | CKG      | 116.1MHz<br>CH 108X              | H24                           | N29° 44.8'<br>E106° 39.2' | 418m                                     | See ZUCK AD2.19                             |
| 笕桥<br>Jianqiao        | NDB                  | CJ       | 324kHz                           | H24                           | N30° 18.3'<br>E120° 10.0' |                                          | See ZSHC AD2.19                             |
| 嘉峪关<br>Jiayuguan      | VOR/DME              | CHW      | 114.5MHz<br>CH 92X               | H24                           | N39° 51.3'<br>E098° 21.0' |                                          | For DME: BTN 58NM and<br>63NM on R310° U/S. |
| 济南<br>Jinan           | VOR/DME              | YQG      | 113.7MHz<br>CH 84X               | H24                           | N36° 50.0'<br>E117° 12.9' | 31m                                      | See ZSJM AD2.19                             |
| 静宁<br>Jingning        | VOR/DME              | JIG      | 113.7MHz<br>CH 84X               | H24                           | N35° 31.9'<br>E105° 43.4' |                                          |                                             |
| 景泰<br>Jingtai         | VOR/DME              | JTA      | 114.9MHz<br>CH 96X               | H24                           | N37° 11.8'<br>E104° 04.8' |                                          |                                             |
| 晋江<br>Jinjiang        | VOR/DME              | JNJ      | 117.0MHz<br>CH 117X              | H24                           | N24° 48.1'<br>E118° 35.8' | 16m                                      | See ZSQZ AD2.19                             |
| 晋宁<br>Jinning         | VOR/DME              | XSJ      | 108.2MHz<br>CH 19X               | H24                           | N24° 41.0'<br>E102° 48.0' | 2 383m                                   | See ZPPP AD2.19                             |
| 金堂<br>Jintang         | VOR/DME              | JTG      | 115.4MHz<br>CH 101X              | H24                           | N30° 52.3'<br>E104° 23.4' |                                          | See ZUUU AD2.19                             |
| 九亭<br>Jiuting         | VOR/DME              | JTN      | 109.6MHz<br>CH 33X               | H24                           | N31° 07.4'<br>E121° 20.5' |                                          | See ZSSS AD2.19                             |
| 九洲<br>Jiuzhou         | VOR/DME              | ZAO      | 117.2MHz<br>CH 119X              | H24                           | N22° 14.7'<br>E113° 36.7' |                                          |                                             |
| 开原<br>Kaiyuan         | VOR/DME              | KYU      | 114.9MHz<br>CH 96X               | H24                           | N42° 37.9'<br>E124° 00.4' |                                          |                                             |
| 康定<br>Kangding        | VOR/DME              | KDJ      | 112.4MHz<br>CH 71X               | H24                           | N30° 08.5'<br>E101° 43.9' | 4 248m                                   | R040° -R115° clock-<br>wise U/S.            |
| 喀什<br>Kashi           | VOR/DME              | KHG      | 115.7MHz<br>CH 104X              | H24                           | N39° 32.8'<br>E076° 01.4' | 1 401m                                   | See ZWSH AD2.19                             |
| 寇岭<br>Kouling         | VOR/DME              | KLX      | 110.6MHz<br>CH 43X               | H24                           | N34° 15.9'<br>E109° 14.9' | 908m                                     | See ZLXY AD2.19                             |

| 导航设施名称<br>Name of Aid | 设施类别<br>Types of Aid | 识别<br>ID | 频率<br>波道<br>Frequency<br>Channel | 工作时间<br>Hours of<br>operation | 坐标<br>Coordinates         | DME<br>天线标高<br>ELEV of<br>DME<br>antenna | 备注<br>Remarks   |
|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|-----------------|
| 来宾<br>Laibin          | VOR/DME              | LBN      | 113.7MHz<br>CH 84X               | H24                           | N23° 45.8′<br>E109° 08.8′ | 126m                                     |                 |
| 莱阳<br>Laiyang         | NDB                  | FD       | 298kHz                           | H24                           | N36° 55.8′<br>E120° 37.9′ |                                          |                 |
| 兰州<br>Lanzhou         | VOR/DME              | DNC      | 114.0MHz<br>CH 87X               | H24                           | N36° 32.5′<br>E103° 37.1′ | 1 965m                                   | See ZLLL AD2.19 |
| 老粮仓<br>Laoliangcang   | VOR/DME              | LLC      | 116.2MHz<br>CH 109X              | H24                           | N28° 04.1′<br>E112° 12.5′ |                                          |                 |
| 老粮仓<br>Laoliangcang   | NDB                  | GJ       | 245kHz                           | H24                           | N28° 05.0′<br>E112° 13.0′ |                                          |                 |
| 拉萨<br>Lhasa           | VOR/DME              | LXA      | 113.1MHz<br>CH 78X               | H24                           | N29° 17.8′<br>E090° 59.9′ | 3 570m                                   | See ZULS AD2.19 |
| 凉城<br>Liangcheng      | NDB                  | SZ       | 282kHz                           | H24                           | N40° 31.1′<br>E112° 29.7′ |                                          |                 |
| 良乡<br>Liangxiang      | NDB                  | JR       | 475kHz                           | H24                           | N39° 43.2′<br>E116° 05.7′ |                                          | See ZBAA AD2.19 |
| 连江<br>Lianjiang       | VOR/DME              | LJG      | 117.6MHz<br>CH 123X              | H24                           | N26° 13.2′<br>E119° 32.9′ |                                          | See ZSFZ AD2.19 |
| 连胜围<br>Lianshengwei   | VOR/DME              | ZUH      | 116.7MHz<br>CH 114X              | H24                           | N22° 13.3′<br>E113° 28.0′ |                                          | See ZGSZ AD2.19 |
| 荔波<br>Libo            | VOR/DME              | GLB      | 112.8MHz<br>CH 75X               | H24                           | N25° 27.3′<br>E107° 57.8′ | 854m                                     |                 |
| 李家<br>Lijia           | NDB                  | RP       | 210kHz                           | H24                           | N28° 37.1′<br>E115° 42.5′ |                                          | See ZSCN AD2.19 |
| 丽江<br>Lijiang         | VOR/DME              | LJA      | 113.7MHz<br>CH 84X               | H24                           | N26° 46.4′<br>E100° 16.4′ | 2 438m                                   | See ZPLJ AD2.19 |
| 醴陵<br>Liling          | VOR/DME              | LIG      | 112.4MHz<br>CH 71X               | H24                           | N27° 38.9′<br>E113° 31.0′ | 85m                                      | See ZGHA AD2.19 |
| 临澧<br>Linli           | VOR/DME              | LIN      | 117.5MHz<br>CH 122X              | H24                           | N29° 21.2′<br>E111° 38.9′ | 108m                                     |                 |
| 柘社<br>Lishe           | NDB                  | BK       | 227kHz                           | H24                           | N29° 53.7′<br>E121° 20.0′ |                                          | See ZSNB AD2.19 |
| 六盘水<br>Liupanshui     | VOR/DME              | LPS      | 116.3MHz<br>CH 110X              | H24                           | N26° 38.6′<br>E105° 01.8′ |                                          |                 |
| 浏阳<br>Liuyang         | VOR/DME              | LYH      | 113.55MHz<br>CH 82Y              | H24                           | N28° 23.6′<br>E113° 20.6′ | 215m                                     | See ZGHA AD2.19 |
| 龙口<br>Longkou         | VOR/DME              | LKO      | 115.8MHz<br>CH 105X              | H24                           | N29° 54.4′<br>E113° 41.5′ |                                          |                 |
| 龙门<br>Longmen         | VOR/DME              | LMN      | 116.3MHz<br>CH 110X              | H24                           | N23° 38.9′<br>E114° 19.6′ | 39m                                      | See ZGGG AD2.19 |
| 龙枣村<br>Longzaocun     | VOR/DME              | LCZ      | 109.0MHz<br>CH 27X               | H24                           | N34° 27.1′<br>E108° 47.6′ | 474m                                     | See ZLXY AD2.19 |
| 龙州<br>Longzhou        | VOR/DME              | LON      | 112.2MHz<br>CH 59X               | H24                           | N22° 21.4′<br>E106° 52.1′ |                                          |                 |

| 导航设施名称<br>Name of Aid | 设施类别<br>Types of Aid | 识别<br>ID | 频率<br>波道<br>Frequency<br>Channel | 工作时间<br>Hours of<br>operation | 坐标<br>Coordinates         | DME<br>天线标高<br>ELEV of<br>DME<br>antenna | 备注<br>Remarks                                                                                                                          |
|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 滦县<br>Luanxian        | VOR/DME              | LUX      | 117.1MHz<br>CH 118X              | H24                           | N39° 44.5'<br>E118° 43.6' |                                          |                                                                                                                                        |
| 芦冲<br>Luchong         | NDB                  | SV       | 345kHz                           | H24                           | N28° 13.0'<br>E113° 20.9' |                                          | See ZGHA AD2.19                                                                                                                        |
| 禄口<br>Lukou           | VOR/DME              | NJL      | 113.6MHz<br>CH 83X               | H24                           | N31° 45.3'<br>E118° 53.2' | 24m                                      | See ZSNJ AD2.19                                                                                                                        |
| 洛川<br>Luochuan        | VOR/DME              | WJC      | 115.3MHz<br>CH 100X              | H24                           | N35° 46.7'<br>E109° 22.6' | 1 117m                                   |                                                                                                                                        |
| 骆岗<br>Luogang         | VOR/DME              | HFE      | 116.7MHz<br>CH 114X              | H24                           | N31° 46.5'<br>E117° 18.1' | 38m                                      | See ZSOF AD2.19                                                                                                                        |
| 泸西<br>Luxi            | VOR/DME              | LXI      | 112.3MHz<br>CH 70X               | H24                           | N24° 32.5'<br>E103° 44.6' |                                          | See ZPPP AD2.19                                                                                                                        |
| 马龙<br>Malong          | VOR/DME              | DJT      | 114.6MHz<br>CH 93X               | H24                           | N25° 31.9'<br>E103° 36.3' | 2 314m                                   | See ZPPP AD2.19                                                                                                                        |
| 芒市<br>Mangshi         | VOR/DME              | LUM      | 114.1MHz<br>CH 88X               | H24                           | N24° 24.5'<br>E098° 32.2' | 886m                                     | See ZPMS AD2.19                                                                                                                        |
| 满洲里<br>Manzhouli      | VOR/DME              | MZL      | 113.1MHz<br>CH 78X               | H24                           | N49° 19.7'<br>E117° 38.7' |                                          | See ZBMZ AD2.19                                                                                                                        |
| 觅子<br>Mizi            | VOR/DME              | MIZ      | 109.6MHz<br>CH 33X               | H24                           | N34° 49.2'<br>E108° 59.7' | 631m                                     | See ZLXY AD2.19                                                                                                                        |
| 秣陵<br>Moling          | VOR/DME              | MLJ      | 117.05MHz<br>CH 117Y             | H24                           | N31° 50.7'<br>E118° 51.3' | 19m                                      | See ZSNJ AD2.19                                                                                                                        |
| 牡丹江<br>Mudanjiang     | VOR/DME              | MDJ      | 117.1MHz<br>CH 118X              | H24                           | N44° 30.9'<br>E129° 33.8' | 278m                                     | See ZYMD AD2.19                                                                                                                        |
| 那拉提<br>Nalati         | VOR/DME              | NLT      | 115.5MHz<br>CH 102X              | H24                           | N43° 26.1'<br>E083° 22.9' | 935m                                     |                                                                                                                                        |
| 南充<br>Nanchong        | VOR/DME              | GAO      | 117.4MHz<br>CH 121X              | H24                           | N30° 48.6'<br>E106° 11.3' |                                          |                                                                                                                                        |
| 南丰<br>Nanfeng         | NDB                  | NF       | 292kHz                           | H24                           | N27° 12.5'<br>E116° 33.5' |                                          |                                                                                                                                        |
| 南康<br>Nankang         | VOR/DME              | BHY      | 117.1MHz<br>CH 118X              | H24                           | N21° 35.2'<br>E109° 25.9' |                                          |                                                                                                                                        |
| 南朗<br>Nanlang         | VOR/DME              | NLG      | 117.7MHz<br>CH 124X              | H24                           | N22° 31.9'<br>E113° 33.7' |                                          | See ZGSZ AD2.19                                                                                                                        |
| 南宁<br>Nanning         | VOR/DME              | WUY      | 112.4MHz<br>CH 71X               | H24                           | N22° 35.1'<br>E108° 08.9' | 143m                                     | See ZGNN AD2.19                                                                                                                        |
| 南泥湾<br>Nanniwan       | VOR/DME              | NNW      | 114.75MHz<br>CH 94Y              | H24                           | N36° 25.2'<br>E109° 29.1' | 1 314m                                   | For VOR: Within 0.2NM<br>on R168° , within 0.3NM<br>on R348° U/S.<br>For DME: Within 0.1NM<br>on R168° , within 0.8NM<br>on R348° U/S. |
| 南通<br>Nantong         | VOR/DME              | NTG      | 115.6MHz<br>CH 103X              | H24                           | N32° 05.8'<br>E120° 58.7' | 19m                                      | See ZSNT AD2.19                                                                                                                        |
| 南翔<br>Nanxiang        | NDB                  | PK       | 208kHz                           | H24                           | N31° 17.0'<br>E121° 19.8' |                                          | See ZSSS AD2.19                                                                                                                        |

| 导航设施名称<br>Name of Aid | 设施类别<br>Types of Aid | 识别<br>ID | 频率<br>波道<br>Frequency<br>Channel | 工作时间<br>Hours of<br>operation | 坐标<br>Coordinates         | DME<br>天线标高<br>ELEV of<br>DME<br>antenna | 备注<br>Remarks                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 南雄<br>Nanxiong        | VOR/DME              | NNX      | 115.6MHz<br>CH 103X              | H24                           | N25° 05.7'<br>E114° 16.4' | 39m                                      |                                                                                                                                                                                                                                                                                                                                                                                                            |
| 南浔<br>Nanxun          | VOR/DME              | NXD      | 116.5MHz<br>CH 112X              | H24                           | N30° 53.8'<br>E120° 25.8' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                            |
| 南浔<br>Nanyingbindao   | VOR/DME              | NYB      | 113.3MHz<br>CH 80X               | H24                           | N20° 00.9'<br>E110° 08.2' | 23m                                      | See ZJHK AD2.19                                                                                                                                                                                                                                                                                                                                                                                            |
| 宁陕<br>Ningshan        | VOR/DME              | NSH      | 116.3MHz<br>CH 110X              | H24                           | N33° 19.1'<br>E108° 18.7' |                                          | For VOR: Beyond 24NM<br>on R015° , R025° -R197°<br>° clock-wise(except with-<br>in 19NM on R029° and<br>within 20NM on R071° ),<br>beyond 24NM on R204° ,<br>R254° -R350° clock-<br>wise U/S;<br>For DME:<br>R001° -R213° clock-<br>wise<br>(except within 19NM on<br>R015° , within 19NM on<br>R029° , within 16NM on<br>R071° , within 18NM on<br>R204° and R209° ),<br>R250° -R353° clock-<br>wise U/S. |
| 牛岭<br>Niuling         | VOR/DME              | JCS      | 116.6MHz<br>CH 113X              | H24                           | N23° 35.9'<br>E116° 24.7' | 138m                                     | See ZGOW AD2.19                                                                                                                                                                                                                                                                                                                                                                                            |
| 鄂尔多斯<br>Ordos         | VOR/DME              | HDS      | 116.1MHz<br>CH 108X              | H24                           | N39° 29.4'<br>E109° 51.7' | 1 401m                                   | See ZBDS AD2.19                                                                                                                                                                                                                                                                                                                                                                                            |
| 蟠龙<br>Panlong         | VOR/DME              | PLT      | 111.6MHz<br>CH 53X               | H24                           | N25° 48.5'<br>E114° 52.5' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                            |
| 盘龙<br>Panlong         | VOR/DME              | XFA      | 110.8MHz<br>CH 45X               | H24                           | N25° 24.1'<br>E102° 56.0' | 2 788m                                   | See ZPPP AD2.19                                                                                                                                                                                                                                                                                                                                                                                            |
| 蓬莱<br>Penglai         | VOR/DME              | YCS      | 116.4MHz<br>CH 111X              | H24                           | N37° 40.7'<br>E121° 00.0' | 48m                                      | See ZSYT AD2.19                                                                                                                                                                                                                                                                                                                                                                                            |
| 平洲<br>Pingzhou        | VOR/DME              | POU      | 114.1MHz<br>CH 88X               | H24                           | N23° 01.3'<br>E113° 11.4' | 27m                                      | See ZGGG AD2.19                                                                                                                                                                                                                                                                                                                                                                                            |
| 邳县<br>Pixian          | VOR/DME              | DPX      | 112.4MHz<br>CH 71X               | H24                           | N34° 16.7'<br>E117° 59.9' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                            |
| 泊头<br>Potou           | VOR/DME              | BTO      | 115.9MHz<br>CH 106X              | H24                           | N38° 06.3'<br>E116° 34.6' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                            |
| 浦东<br>Pudong          | VOR/DME              | PUD      | 116.9MHz<br>CH 116X              | H24                           | N31° 10.3'<br>E121° 47.0' |                                          | See ZSPD AD2.19                                                                                                                                                                                                                                                                                                                                                                                            |
| 黔西<br>Qianxi          | VOR/DME              | QNX      | 113.1MHz<br>CH 78X               | H24                           | N27° 02.5'<br>E106° 01.8' |                                          |                                                                                                                                                                                                                                                                                                                                                                                                            |
| 且末<br>Qimo            | VOR/DME              | QIM      | 114.3MHz<br>CH 90X               | H24                           | N38° 09.1'<br>E085° 32.2' |                                          | For DME: BTN 4.5-<br>5.5NM and 6.5-6.8NM on<br>R195° U/S.                                                                                                                                                                                                                                                                                                                                                  |

| 导航设施名称<br>Name of Aid | 设施类别<br>Types of Aid | 识别<br>ID | 频率<br>波道<br>Frequency<br>Channel | 工作时间<br>Hours of<br>operation | 坐标<br>Coordinates         | DME<br>天线标高<br>ELEV of<br>DME<br>antenna | 备注<br>Remarks                                                                                                                                                                                                                |
|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 奇峰岭<br>Qifengling     | NDB                  | Y        | 417kHz                           | H24                           | N25° 10.3'<br>E110° 19.1' |                                          | See ZGKL AD2.19                                                                                                                                                                                                              |
| 綦江<br>Qijiang         | VOR/DME              | QJG      | 112.7MHz<br>CH 74X               | H24                           | N29° 03.1'<br>E106° 39.9' |                                          | For VOR: BTN R030° -<br>R035° clockwise U/S.<br>For DME: BTN R015° -<br>R073° and R114° -R121<br>° clockwise U/S.                                                                                                            |
| 青白口<br>Qingbaikou     | NDB                  | CD       | 422kHz                           | H24                           | N40° 00.8'<br>E115° 48.3' |                                          | Beyond 25NM on BRG<br>053° ,beyond 25NM on<br>BRG 112° ,within 12NM<br>on BRG 119° ,beyond<br>18NM on BRG 154°<br>,within 9NM and beyond<br>21NM on BRG 225°<br>,within 9NM on BRG 236<br>° ,beyond 18NM on BRG<br>262° U/S. |
| 青岛<br>Qingdao         | VOR/DME              | TAO      | 117.5MHz<br>CH 122X              | H24                           | N36° 17.3'<br>E120° 22.2' | 18m                                      | See ZSQD AD2.19                                                                                                                                                                                                              |
| 庆阳<br>Qingyang        | VOR/DME              | QIY      | 113.4MHz<br>CH 81X               | H24                           | N35° 47.8'<br>E107° 35.9' |                                          |                                                                                                                                                                                                                              |
| 齐齐哈尔<br>Qiqihar       | VOR/DME              | NDG      | 112.9MHz<br>CH 76X               | H24                           | N47° 14.7'<br>E123° 55.2' |                                          | See ZYQQ AD2.19                                                                                                                                                                                                              |
| 奇台<br>Qitai           | VOR/DME              | QTV      | 112.1MHz<br>CH 58X               | H24                           | N43° 59.3'<br>E089° 36.7' |                                          |                                                                                                                                                                                                                              |
| 龟兹<br>Qiuci           | VOR/DME              | XKC      | 114.1MHz<br>CH 88X               | H24                           | N41° 40.6'<br>E082° 50.6' | 1 032m                                   |                                                                                                                                                                                                                              |
| 日喀则<br>Rikaze         | VOR/DME              | RKZ      | 113.5MHz<br>CH 82X               | H24                           | N29° 21.3'<br>E089° 16.3' |                                          | For VOR: R355° -R005°<br>clockwise U/S;<br>For DME: R175° -R180<br>° ,R350° -R010° clock-<br>wise U/S.                                                                                                                       |
| 三江<br>Sanjiang        | VOR/DME              | SJG      | 116.8MHz<br>CH 115X              | H24                           | N25° 46.6'<br>E109° 36.6' | 342m                                     |                                                                                                                                                                                                                              |
| 三峡<br>Sanxia          | VOR/DME              | YIH      | 116.9MHz<br>CH 116X              | H24                           | N30° 33.8'<br>E111° 28.6' |                                          |                                                                                                                                                                                                                              |
| 三亚<br>Sanya           | VOR/DME              | SYX      | 112.5MHz<br>CH 72X               | H24                           | N18° 18.6'<br>E109° 10.4' | 457m                                     | See ZJSY AD2.19                                                                                                                                                                                                              |
| 三原<br>Sanyuan         | NDB                  | OD       | 202kHz                           | H24                           | N34° 35.9'<br>E108° 54.9' |                                          | See ZLXY AD2.19                                                                                                                                                                                                              |
| 三灶<br>Sanzao          | NDB                  | U        | 272kHz                           | H24                           | N21° 59.3'<br>E113° 21.3' |                                          |                                                                                                                                                                                                                              |

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|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 莎车<br>Shache          | VOR/DME              | SCH      | 113.3MHz<br>CH 80X               | H24                           | N38° 25.7'<br>E077° 14.5' |                                          | For DME: R030° -R035° clockwise, within 10 NM on R050° , R220° - R232° clockwise(except beyond 11NM on R221° ), R279° -R290° clockwise, within 8NM and BTN 15.5-17.2NM on R316° U/S. |
| 上饶<br>Shangrao        | VOR/DME              | SHR      | 114.0MHz<br>CH 87X               | H24                           | N28° 25.0'<br>E117° 58.2' |                                          |                                                                                                                                                                                      |
| 汕头<br>Shantou         | VOR/DME              | SWA      | 112.6MHz<br>CH 73X               | H24                           | N23° 26.4'<br>E116° 46.0' |                                          |                                                                                                                                                                                      |
| 沙市<br>Shashi          | NDB                  | UK       | 487kHz                           | H24                           | N30° 17.4'<br>E112° 16.4' |                                          |                                                                                                                                                                                      |
| 嵊州<br>Shengzhou       | VOR/DME              | SHZ      | 113.4MHz<br>CH 81X               | H24                           | N29° 36.0'<br>E120° 49.0' |                                          |                                                                                                                                                                                      |
| 沈阳<br>Shenyang        | VOR/DME              | SEY      | 114.1MHz<br>CH 88X               | H24                           | N41° 38.5'<br>E123° 28.7' | 59m                                      | See ZYTX AD2.19                                                                                                                                                                      |
| 石各庄<br>Shigezhuang    | NDB                  | VM       | 280kHz                           | H24                           | N39° 17.8'<br>E116° 54.1' |                                          | Beyond 27NM on BRG 184° U/S.                                                                                                                                                         |
| 石龙<br>Shilong         | VOR/DME              | SHL      | 115.7MHz<br>CH 104X              | H24                           | N23° 05.5'<br>E113° 51.0' |                                          | See ZGGG AD2.19                                                                                                                                                                      |
| 石湫<br>Shiqiu          | VOR/DME              | SNQ      | 115.75MHz<br>CH 104Y             | H24                           | N31° 40.8'<br>E118° 58.1' | 27m                                      | See ZSNJ AD2.19                                                                                                                                                                      |
| 双流<br>Shuangliu       | VOR/DME              | CTU      | 115.7MHz<br>CH 104X              | H24                           | N30° 34.4'<br>E103° 56.6' | 503m                                     | See ZUUU AD2.19                                                                                                                                                                      |
| 水泉<br>Shuiquan        | NDB                  | LS       | 445kHz                           | H24                           | N45° 27.0'<br>E126° 02.7' |                                          | See ZYHB AD2.19                                                                                                                                                                      |
| 硕放<br>Shuofang        | VOR/DME              | SUF      | 114.1MHz<br>CH 88X               | H24                           | N31° 29.9'<br>E120° 25.9' | 11m                                      | See ZSWX AD2.19                                                                                                                                                                      |
| 书院<br>Shuyuan         | VOR/DME              | XSU      | 112.7MHz<br>CH 74X               | H24                           | N30° 55.9'<br>E121° 52.4' | 27m                                      | See ZSPD AD2.19                                                                                                                                                                      |
| 塔城<br>Tacheng         | VOR/DME              | TCH      | 113.1MHz<br>CH 78X               | H24                           | N46° 40.1'<br>E083° 20.7' |                                          | R220° -R060° clockwise U/S(except on R284° , R299° , R304° and within 11NM on R297° ).                                                                                               |
| 太原<br>Taiyuan         | VOR/DME              | TYN      | 113.1MHz<br>CH 78X               | H24                           | N37° 44.9'<br>E112° 37.2' | 794m                                     | See ZBYN AD2.19                                                                                                                                                                      |
| 汤河口<br>Tanghekou      | NDB                  | YV       | 514kHz                           | H24                           | N40° 44.0'<br>E116° 38.0' |                                          | Beyond 25NM on BRG 008° ,beyond 25NM on BRG 012° ,beyond 25NM on BRG 022° ,beyond 23NM on BRG 186° ,beyond 17NM on BRG 331° U/S.                                                     |
| 桃花<br>Taohua          | VOR/DME              | THA      | 114.7MHz<br>CH 94X               | H24                           | N31° 46.7'<br>E117° 07.4' | 45m                                      | See ZSOF AD2.19                                                                                                                                                                      |

| 导航设施名称<br>Name of Aid | 设施类别<br>Types of Aid | 识别<br>ID | 频率<br>波道<br>Frequency<br>Channel | 工作时间<br>Hours of<br>operation | 坐标<br>Coordinates         | DME<br>天线标高<br>ELEV of<br>DME<br>antenna | 备注<br>Remarks                                                                   |
|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|---------------------------------------------------------------------------------|
| 陶家宫<br>Taojiagong     | VOR/DME              | HAM      | 113.1MHz<br>CH 78X               | H24                           | N42° 50.6'<br>E093° 40.1' | 843m                                     | For DME: Within 13NM<br>on R290° U/S.                                           |
| 天河<br>Tianhe          | VOR/DME              | WHA      | 112.2MHz<br>CH 59X               | H24                           | N30° 46.9'<br>E114° 12.2' | 43m                                      | See ZHHH AD2.19                                                                 |
| 天河<br>Tianhe          | NDB                  | HG       | 254kHz                           | H24                           | N30° 55.5'<br>E114° 21.0' |                                          | See ZHHH AD2.19                                                                 |
| 天津<br>Tianjin         | VOR/DME              | TAJ      | 112.1MHz<br>CH 58X               | H24                           | N39° 06.6'<br>E117° 21.5' | 11m                                      | See ZBTJ AD2.19                                                                 |
| 天津<br>Tianjin         | NDB                  | CG       | 339kHz                           | H24                           | N39° 04.8'<br>E117° 22.5' |                                          |                                                                                 |
| 天门<br>Tianmen         | VOR/DME              | WTM      | 108.8MHz<br>CH 25X               | H24                           | N30° 38.3'<br>E113° 08.6' |                                          |                                                                                 |
| 天镇<br>Tianzhen        | VOR/DME              | TZH      | 115.6MHz<br>CH 103X              | H24                           | N40° 24.5'<br>E114° 03.1' |                                          | On R279° below 7800M<br>BTN 12/23NM, above<br>7800M BTN 19/23NM U/<br>S.        |
| 跳马<br>Tiaoma          | VOR/DME              | DTM      | 114.05MHz<br>CH 87Y              | H24                           | N27° 59.0'<br>E113° 07.5' | 186m                                     | See ZGHA AD2.19                                                                 |
| 统景场<br>Tongjingchang  | NDB                  | OS       | 241kHz                           | H24                           | N29° 51.1'<br>E106° 50.8' |                                          | See ZUCK AD2.19                                                                 |
| 通辽<br>Tongliao        | VOR/DME              | TGO      | 116.3MHz<br>CH 110X              | H24                           | N43° 33.6'<br>E122° 11.8' |                                          |                                                                                 |
| 桐庐<br>Tonglu          | VOR/DME              | TOL      | 115.9MHz<br>CH 106X              | H24                           | N29° 45.8'<br>E119° 39.6' | 54m                                      | For DME: R098° -R153°<br>°,R282° -R315° and<br>R328° -R338° clock-<br>wise U/S. |
| 铜仁<br>Tongren         | VOR/DME              | TRN      | 115.2MHz<br>CH 99X               | H24                           | N27° 52.1'<br>E109° 17.6' | 721m                                     |                                                                                 |
| 土木尔台<br>Tumurtai      | VOR/DME              | TMR      | 113.3MHz<br>CH 80X               | H24                           | N41° 50.6'<br>E113° 09.2' |                                          |                                                                                 |
| 屯里<br>Tunli           | NDB                  | FZ       | 247kHz                           | H24                           | N37° 27.1'<br>E121° 10.7' |                                          | See ZSYT AD2.19                                                                 |
| 乌鲁木齐<br>Urumqi        | VOR/DME              | WUR      | 115.3MHz<br>CH 100X              | H24                           | N43° 54.8'<br>E087° 30.5' | 664m                                     | See ZWWW AD2.19                                                                 |
| 万昌<br>Wanchang        | VOR/DME              | LJB      | 115.9MHz<br>CH 106X              | H24                           | N43° 46.4'<br>E125° 51.1' | 199m                                     | See ZYCC AD2.19                                                                 |
| 王滨沟<br>Wangbingou     | NDB                  | KY       | 365kHz                           | H24                           | N41° 42.3'<br>E123° 44.8' |                                          | See ZYTX AD2.19                                                                 |
| 汪清<br>Wangqing        | VOR/DME              | WQG      | 112.1MHz<br>CH 58X               | H24                           | N43° 17.6'<br>E129° 47.1' |                                          | R130° -R205° clock-<br>wise U/S,R037° -R055°<br>clockwise for DME U/S.          |
| 威海<br>Weihai          | VOR/DME              | WEH      | 115.8MHz<br>CH 105X              | H24                           | N37° 11.0'<br>E122° 13.6' | 45m                                      | See ZSWH AD2.19                                                                 |
| 威宁<br>Weining         | NDB                  | HX       | 285kHz                           | H24                           | N26° 51.6'<br>E104° 16.9' |                                          |                                                                                 |

| 导航设施名称<br>Name of Aid | 设施类别<br>Types of Aid | 识别<br>ID | 频率<br>波道<br>Frequency<br>Channel | 工作时间<br>Hours of<br>operation | 坐标<br>Coordinates         | DME<br>天线标高<br>ELEV of<br>DME<br>antenna | 备注<br>Remarks                |
|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|------------------------------|
| 尉氏<br>Weishi          | VOR/DME              | DWS      | 117.4MHz<br>CH 121X              | H24                           | N34° 19.4'<br>E114° 04.7' | 80m                                      | See ZHCC AD2.19              |
| 魏县<br>Weixian         | VOR/DME              | WXI      | 115.7MHz<br>CH 104X              | H24                           | N36° 21.8'<br>E114° 55.0' |                                          |                              |
| 翁源<br>Wengyuan        | VOR/DME              | WYN      | 113.9MHz<br>CH 86X               | H24                           | N24° 21.0'<br>E114° 06.7' | 43m                                      | Beyond 33NM of R098°<br>U/S. |
| 闻堰<br>Wenyan          | NDB                  | WY       | 572kHz                           | H24                           | N30° 07.3'<br>E120° 12.1' |                                          | See ZSHC AD2.19              |
| 武当山<br>Wudangshan     | VOR/DME              | DSY      | 115.15MHz<br>CH 98Y              | H24                           | N32° 34.3'<br>E110° 56.1' | 364m                                     |                              |
| 五凤溪<br>Wufengxi       | VOR/DME              | WFX      | 117.1MHz<br>CH 118X              | H24                           | N30° 36.4'<br>E104° 29.5' |                                          | See ZUUU AD2.19              |
| 无极<br>Wuji            | NDB                  | FL       | 272kHz                           | H24                           | N38° 14.9'<br>E114° 53.3' |                                          | See ZBSJ AD2.19              |
| 五通<br>Wutong          | NDB                  | PA       | 286kHz                           | H24                           | N25° 24.3'<br>E110° 03.6' |                                          | See ZGKL AD2.19              |
| 无锡<br>Wuxi            | VOR/DME              | VMC      | 113.9MHz<br>CH 86X               | H24                           | N31° 44.6'<br>E120° 11.5' | 38m                                      | See ZSWX AD2.19              |
| 吴忠<br>Wuzhong         | VOR/DME              | DWZ      | 112.4MHz<br>CH 71X               | H24                           | N37° 55.3'<br>E106° 20.6' | 1 103m                                   | See ZLIC AD2.19              |
| 厦门<br>Xiamen          | VOR/DME              | XMN      | 114.5MHz<br>CH 92X               | H24                           | N24° 32.6'<br>E118° 07.4' | 23m                                      | See ZSAM AD2.19              |
| 小丹阳<br>Xiaodanyang    | NDB                  | ID       | 440kHz                           | H24                           | N31° 40.0'<br>E118° 43.0' |                                          | See ZSNJ AD2.19              |
| 西昌<br>Xichang         | VOR/DME              | XIC      | 114.2MHz<br>CH 89X               | H24                           | N28° 00.2'<br>E102° 11.0' | 1 566m                                   | See ZUXC AD2.19              |
| 锡林浩特<br>Xilinhot      | VOR/DME              | HOT      | 114.3MHz<br>CH 90X               | H24                           | N43° 54.9'<br>E115° 58.0' |                                          |                              |
| 杏林<br>Xinglin         | VOR/DME              | XLN      | 114.7MHz<br>CH 94X               | H24                           | N24° 33.9'<br>E118° 00.9' | 46m                                      | See ZSAM AD2.19              |
| 行唐<br>Xingtang        | NDB                  | OC       | 235kHz                           | H24                           | N38° 27.3'<br>E114° 33.3' |                                          | See ZBSJ AD2.19              |
| 西宁<br>Xining          | VOR/DME              | XNN      | 116.5MHz<br>CH 112X              | H24                           | N36° 31.6'<br>E102° 01.8' | 2 196m                                   | See ZLXN AD2.19              |
| 新郑<br>Xinzheng        | VOR/DME              | CGO      | 114.5MHz<br>CH 92X               | H24                           | N34° 31.1'<br>E113° 50.6' | 158m                                     | See ZHCC AD2.19              |
| 西山<br>Xishan          | VOR/DME              | SGM      | 110.6MHz<br>CH 43X               | H24                           | N25° 04.9'<br>E102° 31.2' | 2 312m                                   | See ZPPP AD2.19              |
| 洹水<br>Xishui          | VOR/DME              | XSH      | 115.4MHz<br>CH 101X              | H24                           | N30° 26.1'<br>E115° 16.0' |                                          |                              |
| 薛家岛<br>Xuejiadao      | VOR/DME              | XDZ      | 110.4MHz<br>CH 41X               | H24                           | N35° 58.7'<br>E120° 17.4' | 110m                                     | See ZSQD AD2.19              |
| 叙永<br>Xuyong          | VOR/DME              | XYO      | 116.7MHz<br>CH 114X              | H24                           | N28° 10.3'<br>E105° 25.2' |                                          |                              |

| 导航设施名称<br>Name of Aid | 设施类别<br>Types of Aid | 识别<br>ID | 频率<br>波道<br>Frequency<br>Channel | 工作时间<br>Hours of<br>operation | 坐标<br>Coordinates         | DME<br>天线标高<br>ELEV of<br>DME<br>antenna | 备注<br>Remarks                                                                                                                                                                                                                          |
|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 徐州<br>Xuzhou          | VOR/DME              | XUZ      | 114.3MHz<br>CH 90X               | H24                           | N34° 03.6'<br>E117° 33.0' | 6m                                       | See ZSXZ AD2.19                                                                                                                                                                                                                        |
| 雅布赖<br>Yabrai         | VOR/DME              | YBL      | 115.7MHz<br>CH 104X              | H24                           | N39° 25.3'<br>E102° 46.5' |                                          |                                                                                                                                                                                                                                        |
| 盐城<br>Yancheng        | VOR/DME              | YCH      | 115.3MHz<br>CH 100X              | H24                           | N33° 25.3'<br>E120° 12.3' | 13m                                      | See ZSYN AD2.19                                                                                                                                                                                                                        |
| 扬州<br>Yangzhou        | VOR/DME              | SJD      | 113.1MHz<br>CH 78X               | H24                           | N32° 32.7'<br>E119° 43.6' | 13m                                      | See ZSYA AD2.19                                                                                                                                                                                                                        |
| 延吉<br>Yanji           | VOR/DME              | YNJ      | 113.1MHz<br>CH 78X               | H24                           | N42° 53.0'<br>E129° 27.1' | 202m                                     | See ZYYJ AD2.19                                                                                                                                                                                                                        |
| 烟庄<br>Yanzhuang       | NDB                  | ZS       | 359kHz                           | H24                           | N34° 13.3'<br>E108° 51.2' |                                          | See ZLXY AD2.19                                                                                                                                                                                                                        |
| 姚集<br>Yaoji           | NDB                  | DO       | 266kHz                           | H24                           | N34° 04.5'<br>E117° 48.7' |                                          | See ZSXZ AD2.19                                                                                                                                                                                                                        |
| 叶尔羌<br>Yarkant        | VOR/DME              | DSC      | 112.5MHz<br>CH 72X               | H24                           | N38° 13.3'<br>E077° 04.3' | 1 317m                                   |                                                                                                                                                                                                                                        |
| 宜宾<br>Yibin           | VOR/DME              | YBN      | 116.5MHz<br>CH 112X              | H24                           | N28° 47.9'<br>E104° 33.4' |                                          | For VOR: R050° -R058° clockwise, beyond 23NM on R006° , beyond 22NM on R189° U/S.<br>For DME: R346° -R058° clockwise(except within 11NM on R006° and within 11NM on R351° ), R160° -R218° clockwise(except within 12NM on R198° ) U/S. |
| 银川<br>Yinchuan        | VOR/DME              | YHD      | 112.0MHz<br>CH 57X               | H24                           | N38° 20.8'<br>E106° 24.6' | 1 141m                                   | See ZLIC AD2.19                                                                                                                                                                                                                        |
| 英德<br>Yingde          | VOR/DME              | YIN      | 113.5MHz<br>CH 82X               | H24                           | N24° 11.4'<br>E113° 24.9' | 167m                                     | See ZGGG AD2.19                                                                                                                                                                                                                        |
| 义乌<br>Yiwu            | VOR/DME              | YEU      | 113.2MHz<br>CH 79X               | H24                           | N29° 19.9'<br>E120° 01.9' | 87m                                      | See ZSYW AD2.19                                                                                                                                                                                                                        |
| 永福<br>Yongfu          | NDB                  | JW       | 281kHz                           | H24                           | N25° 00.5'<br>E110° 01.0' |                                          | See ZGKL AD2.19                                                                                                                                                                                                                        |
| 玉都<br>Yudu            | VOR/DME              | DJQ      | 114.7MHz<br>CH 94X               | H24                           | N38° 13.0'<br>E085° 26.6' | 1 232m                                   |                                                                                                                                                                                                                                        |
| 榆林<br>Yulin           | VOR/DME              | YLX      | 116.7MHz<br>CH 114X              | H24                           | N38° 22.9'<br>E109° 34.7' | 1 194m                                   |                                                                                                                                                                                                                                        |
| 运城<br>Yuncheng        | VOR/DME              | YCE      | 112.3MHz<br>CH 70X               | H24                           | N35° 07.1'<br>E111° 02.0' |                                          |                                                                                                                                                                                                                                        |
| 云和<br>Yunhe           | NDB                  | BZ       | 244kHz                           | H24                           | N28° 06.1'<br>E119° 33.7' |                                          |                                                                                                                                                                                                                                        |
| 簪岗镇<br>Zangangzhen    | NDB                  | JB       | 403kHz                           | H24                           | N39° 02.6'<br>E116° 11.9' |                                          |                                                                                                                                                                                                                                        |
| 泽当<br>Zedang          | NDB                  | DM       | 435kHz                           | H24                           | N29° 15.3'<br>E091° 45.9' |                                          | See ZULS AD2.19                                                                                                                                                                                                                        |

| 导航设施名称<br>Name of Aid | 设施类别<br>Types of Aid | 识别<br>ID | 频率<br>波道<br>Frequency<br>Channel | 工作时间<br>Hours of<br>operation | 坐标<br>Coordinates         | DME<br>天线标高<br>ELEV of<br>DME<br>antenna | 备注<br>Remarks                                                                                                  |
|-----------------------|----------------------|----------|----------------------------------|-------------------------------|---------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 张家界<br>Zhangjiajie    | VOR/DME              | DYG      | 114.4MHz<br>CH 91X               | H24                           | N29° 05.6'<br>E110° 24.3' | 246m                                     | See ZGDY AD2.19                                                                                                |
| 张家口<br>Zhangjiakou    | VOR/DME              | HAR      | 113.9MHz<br>CH 86X               | H24                           | N40° 43.7'<br>E114° 57.8' |                                          | For DME: R004° -R027°<br>° clockwise U/S.                                                                      |
| 张庄<br>Zhangzhuang     | NDB                  | AR       | 520kHz                           | H24                           | N36° 43.4'<br>E116° 55.0' |                                          |                                                                                                                |
| 昭通<br>Zhaotong        | VOR/DME              | ZAT      | 115.5MHz<br>CH 102X              | H24                           | N27° 19.4'<br>E103° 45.3' |                                          | For VOR: Beyond 20NM<br>on R077° U/S;<br>For DME: R053° -R057°<br>° clockwise and beyond<br>18NM on R077° U/S. |
| 正定<br>Zhengding       | VOR/DME              | SJW      | 117.7MHz<br>CH 124X              | H24                           | N38° 16.8'<br>E114° 41.9' | 68m                                      | See ZBSJ AD2.19                                                                                                |
| 中卫<br>Zhongwei        | VOR/DME              | ZWX      | 117.5MHz<br>CH 122X              | H24                           | N37° 34.4'<br>E105° 07.5' | 1 263m                                   |                                                                                                                |
| 中原<br>Zhongyuan       | VOR/DME              | DZY      | 116.8MHz<br>CH 115X              | H24                           | N34° 43.6'<br>E113° 33.0' | 196m                                     | See ZHCC AD2.19                                                                                                |
| 周口<br>Zhoukou         | VOR/DME              | ZHO      | 115.5MHz<br>CH 102X              | H24                           | N33° 39.9'<br>E114° 39.3' | 102m                                     |                                                                                                                |
| 舟山<br>Zhoushan        | VOR/DME              | HSN      | 112.3MHz<br>CH 70X               | H24                           | N29° 55.9'<br>E122° 21.8' |                                          | See ZSZS AD2.19                                                                                                |
| 资阳<br>Ziyang          | VOR/DME              | ZYG      | 112.1MHz<br>CH 58X               | H24                           | N30° 07.1'<br>E104° 40.6' |                                          | See ZUUU AD2.19                                                                                                |
| 祖庵<br>Zu'an           | VOR/DME              | ZNX      | 110.8MHz<br>CH 45X               | H24                           | N34° 06.7'<br>E108° 30.2' | 431m                                     | See ZLXY AD2.19                                                                                                |