

**VHHH AD 2.19 RADIO NAVIGATION AND LANDING AIDS**

1	2	3	4	5	6	7
Type of aid, CAT of ILS/MLS	ID	Frequency	Hours of Op	Site of transmitting antenna co-ordinates	Elevation of DME transmitting antenna	Remarks
DVOR	CH	112.30 MHz	H24	22 13 10.35 N 114 01 48.20 E		Coverage 190 NM from ARP
DME	CH	CH 70X	H24	22 13 11.69 N 114 01 48.75 E	108.7 m	Co-located with 'CH' DVOR
LOC 25L CAT II	IFL	108.9 MHz	H24	22 17 43.13 N 113 53 42.80 E		Unusable beyond 28° left of course
GP 25L	IFL	329.3 MHz	H24	22 18 19.77 N 113 55 49.30 E		GP 3° (nominal) Unusable beyond 7° left of course
DME 25L	IFL	CH 26X	H24	22 18 19.77 N 113 55 49.30 E	5.79 m	Co-located with GP 25L
LOC 07R CAT II	ISR	109.30 MHz	H24	22 18 29.89 N 113 56 07.90 E		Unusable beyond 19° right of course and beyond 25° left of course
GP 07R	ISR	332 MHz	H24	22 17 47.64 N 113 54 09.59 E		GP 3° (nominal)
DME 07R	ISR	CH 30X	H24	22 17 47.64 N 113 54 09.59 E	5.79 m	Co-located with GP 07R
LOC 07L CAT II	I-ZSL	111.1 MHz	H24	22 19 21.08N 113 56 02.35E		Unusable beyond 28° right of course
GP 07L	I-ZSL	331.7MHz	H24	22 18 46.29N 113 54 01.55E		GP 3° (nominal)
DME 07L	I-ZSL	CH 48X	H24	22 18 46.29N 113 54 01.55E	5.33 m	Co-located with GP 07L

1	2	3	4	5	6	7
Type of aid, CAT of ILS/MLS	ID	Frequency	Hours of Op	Site of transmitting antenna co-ordinates	Elevation of DME transmitting antenna	Remarks
LOC 25R CAT IIIA	I-TFR	110.9 MHz	H24	22 18 34.27N 113 53 37.07E		Unusable beyond 20 NM below 5 500ft from 4° right of course
GP 25R	I-TFR	330.8 MHz	H24	22 19 16.43N 113 55 35.09E		GP 3° (nominal) Unusable beyond 6° right of course.
DME 25R	I-TFR	CH 46X	H24	22 19 16.43N 113 55 35.09E	5.74 m	Co-located with GP 25R
NDB	LC * (See Note 1)	390 kHz	H24	22 17 43N 113 53 43E		Coverage 10 NM
DVOR	LKC	113.2 MHz	H24	22 22 44.12 N 113 53 01.50 E		(see Note 2)
DME	LKC	CH 79X	H24	22 22 44.12 N 113 53 01.50 E	77 m	Co-located with 'LKC' DVOR
DVOR	SMT	114.8 MHz	H24	22 20 15.43 N 113 58 55.46 E		(see Note 3)
DME	SMT	CH 95X	H24	22 20 15.43 N 113 58 55.46 E	12 m	Co-located with 'SMT' DVOR
DVOR	TD	116.10 MHz	H24	22 14 52.42 N 114 17 35.30 E		(see Note 4)
DME	TD	CH 108X	H24	22 14 52.42 N 114 17 35.30 E	249.87 m	Paired with 'TD' DVOR Coverage same as 'TD' DVOR

**Notes:**

1. For technical purposes, an additional dot is used to denote that the standby transmitter is radiating.
2. Coverage not less than 40NM from LKC DVOR with the following restrictions:-
  - (a) unusable between radials 064 and 065 beyond 10NM,
  - (b) unusable between radials 065 and 080 beyond 30NM and below 7 000ft beyond 18NM,
  - (c) unusable between radials 080 and 095 beyond 18NM below 10 000ft,
  - (d) unusable between radials 140 and 150 beyond 22NM below 11 000ft,
  - (e) unusable between radials 150 and 160 beyond 22NM below 7 000ft,
  - (f) unusable between radials 150 and 160 beyond 33NM below 11 000ft,
  - (g) unusable between radials 160 and 175 beyond 20NM below 11 000ft,
  - (h) unusable between radials 215 and 300 beyond 15NM,
  - (i) unusable between radials 300 and 064 north of latitude 22°30'N.
3. Coverage not less than 25NM from SMT DVOR with the following restrictions:-
  - (a) unusable between radials 040 and 050 beyond 15NM,
  - (b) unusable between radials 050 and 070 beyond 15NM below 7 000ft,
  - (c) unusable between radials 115 and 160 beyond 20NM below 9 000ft,
  - (d) unusable between radials 160 and 215 beyond 13NM below 12 000ft,
  - (e) unusable between radials 215 and 300 beyond 15NM,
  - (f) unusable between radials 300 and 040 beyond 10NM.
4. Coverage not less than 200 NM from TD DVOR at 35 000 ft and above.

INTENTIONALLY

LEFT

BLANK