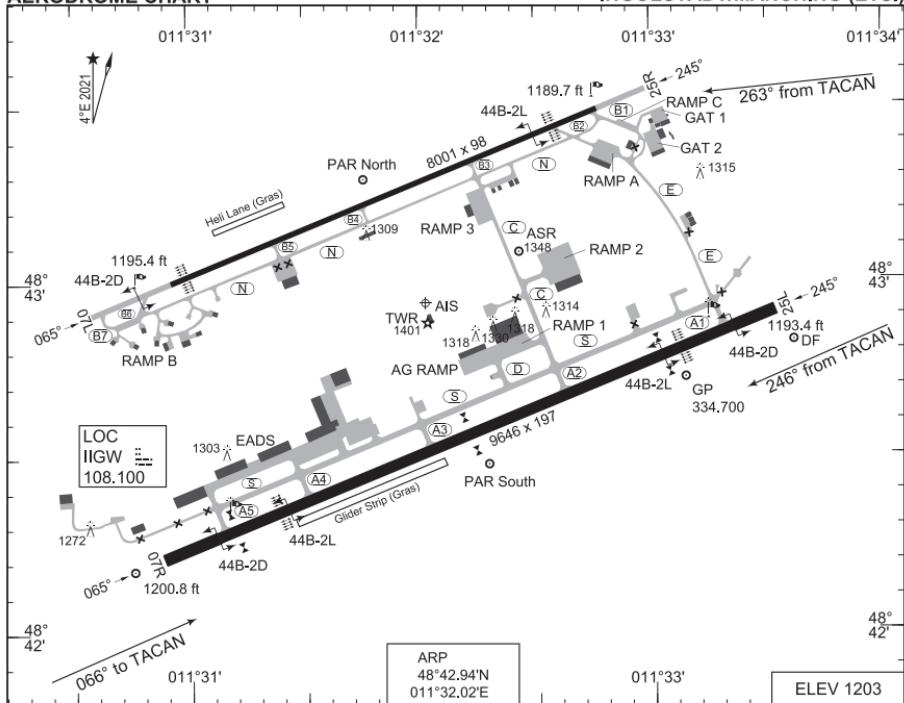


AERODROME CHART

INGOLSTADT/MANCHING (ETSI)



RWY	LCN	TORA	ASDA	TODA	LDA	PAPI	TDZE	THR PSN
07L	92	8001	8001	8001	8001	3.0°	1196	48°43.00'N 011°30.92'E
25R	92	8001	8001	8001	8001	3.0°	1192	48°43.49'N 011°32.77'E
07R	92	9646	10444	10709	9646	3.0°	1201	48°42.27'N 011°31.12'E
25L	92	9646	10667	10709	9646	3.0°	1197	48°42.86'N 011°33.35'E

INGO TOWER 300.900 389.600 259.575 139.400x 125.255

INGO RADAR 282.000 388.850 378.475 139.400x 120.605 125.580 SSR 4260 - 4267

	PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA
SRA	TERPS	07R					AB CD E	TERPS	1620 - 0.8 425 (500-0.8/1.6) 1620 - 1.2 425 (500-1.2/2.0) 1620 - 1.6 425 (500-1.6/2.4)
	TERPS	25L					ABC DE	TERPS	1560 - 1.6 363 (400-1.6/1.6) 1560 - 1.6 363 (400-1.6/2.0)
	TERPS	07L					AB C D E	TERPS	1580 - 0.8 383 (400-0.8/1.6) 1580 - 1.2 383 (400-1.2/1.6) 1580 - 1.2 383 (400-1.2/2.0) 1600 - 1.6 403 (500-1.6/2.4)
	TERPS	25R					ABCD E	TERPS	1570 - 1.6 378 (400-1.6) 1580 - 2.4 388 (400-2.4)

CHANGE•VAR (140/21)

AERODROME CHART

INGOLSTADT/MANCHING (ETS)

ZentriLuftOp 20 MAY 2021

PANS-OPS

INSTRUMENT DEPARTURE CHART

AD ELEV 1203

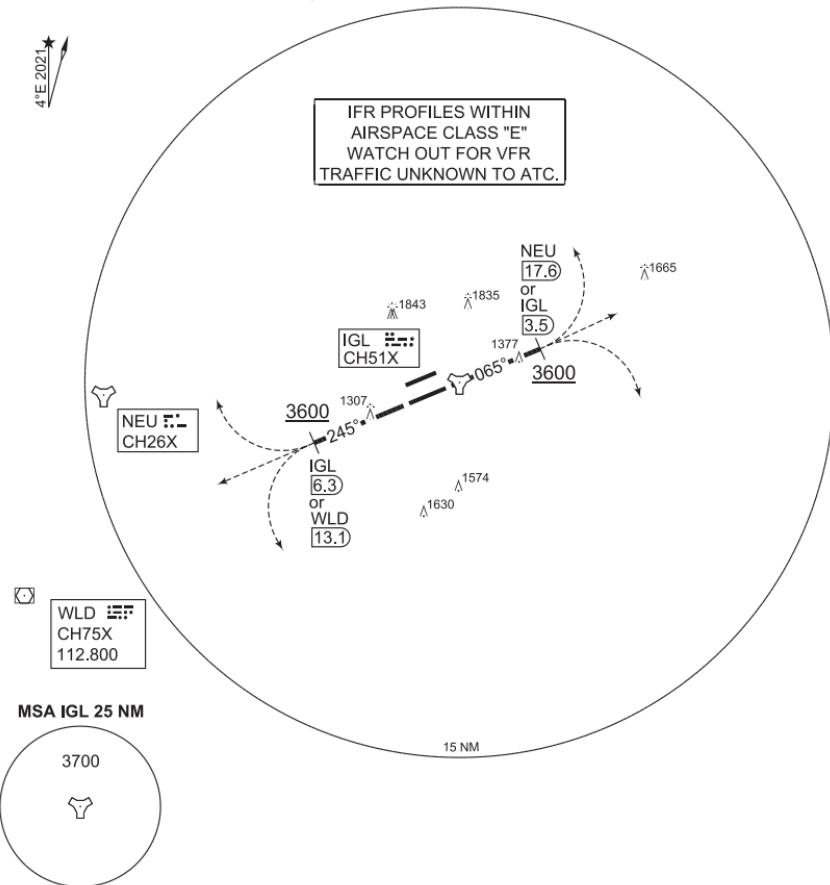
SI 107 - 125

INGOLSTADT/MANCHING (ETSI)

INGO TOWER 300.900 125.255	INGO RADAR 282.000 120.605 125.580	MUENCHEN RADAR 242.200 VHF O/R
	RWY from - to	60 120 180 240 300 Reason
	25L DER - 3600 ft	608 1216 1824 2432 3040 ATC

NOTE:

SI 125

CHECK FOR CLOSE-IN OBSTACLE (BUILDING
327 M 221° BEYOND DER, 1243 FT MSL)

EMERG SAFE ALT 100 NM 13500

TA 5000

CHANGE: VAR, (140/21)

SI 125 (RWY 25L)	- Climb on track 245° to IGL/6.3 DME or WLD/13.1 DME - Cross IGL/6.3 DME or WLD/13.1 DME at 3600 ft or above - Continue as cleared by ATC
SI 107 (RWY 07R)	- Climb on track 065° to IGL/3.5 DME or NEU/17.6 DME - Cross IGL/3.5 DME or NEU/17.6 DME at 3600 ft or above - Continue as cleared by ATC

SI 107 - 125

48°42.94'N
011°32.02'E

INGOLSTADT/MANCHING (ETSI)

ZentralLuftOp 20 MAY 2021

PANS-OPS

INSTRUMENT DEPARTURE CHART

AD ELEV 1203

SI 207 - 225

INGOLSTADT/MANCHING (ETSI)

INGO TOWER 300.900 125.255		INGO RADAR 282.000 120.605 125.580			MUEENCHEN RADAR 242.200 VHF O/R			
RWY	from - to	60	120	180	240	300	Reason	
25R	DER - 3600 ft	608	1216	1824	2432	3040	ATC	
07L	DER - 3600 ft	608	1216	1824	2432	3040	ATC	

NOTE:

SI 207

CHECK FOR CLOSE-IN OBSTACLE (BUILDING 295 M

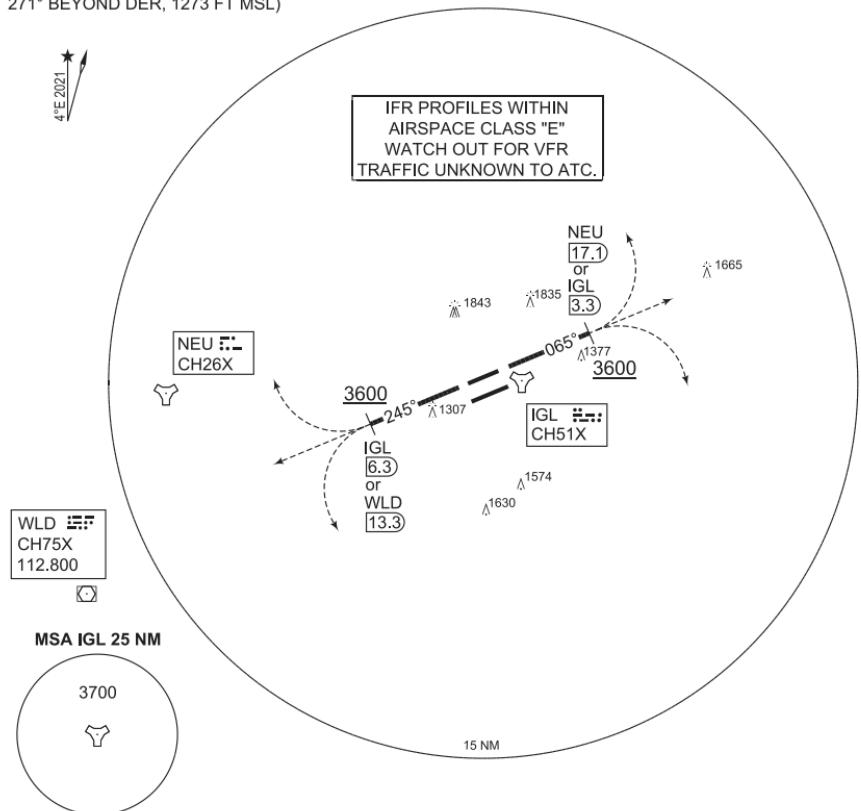
103° BEYOND DER, 1230 FT MSL AND SEVERAL

TREES LEFT SIDE OF TRACK, MAX 1247 FT MSL)

SI 225

CHECK FOR CLOSE-IN OBSTACLE (BUILDING 843 M

271° BEYOND DER, 1273 FT MSL)



EMERG SAFE ALT 100 NM 13500

TA 5000

CHANGE: VAR (140/21)

SI 225 (RWY 25R)	<ul style="list-style-type: none"> Climb on track 245° to IGL/6.3 DME or WLD/13.3 DME Cross IGL/6.3 DME or WLD/13.3 DME at 3600 ft or above Continue as cleared by ATC
SI 207 (RWY 07L)	<ul style="list-style-type: none"> Climb on track 065° to IGL/3.3 DME or NEU/17.1 DME Cross IGL/3.3 DME or NEU/17.1 DME at 3600 ft or above Continue as cleared by ATC

SI 207 - 225

48°42.94'N
011°32.02'E

INGOLSTADT/MANCHING (ETSI)

ZentralLuftOp 20 MAY 2021

PANS-OPS INSTRUMENT APPROACH CHART

AD ELEV 1203

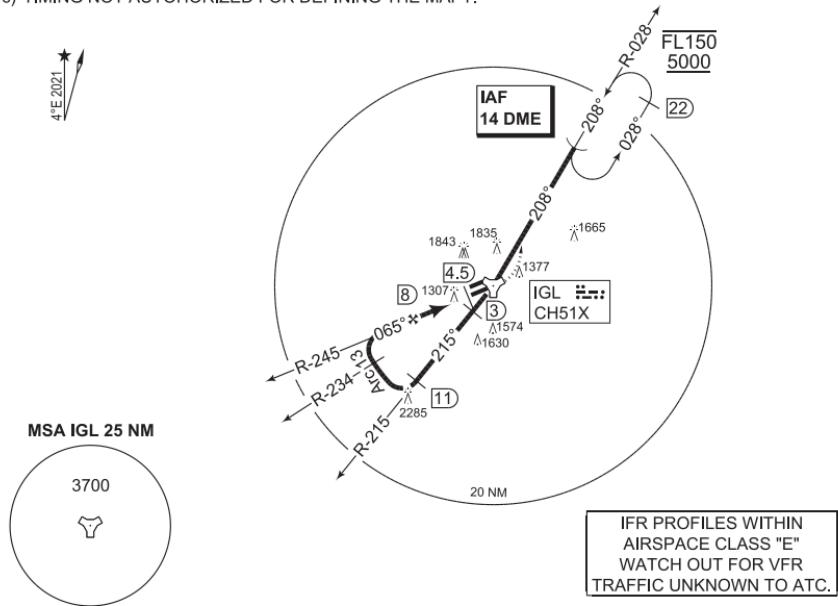
TACAN RWY 07R
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR			INGO RADAR			INGO TOWER		
TACAN IGL CH51X	APP COURSE 065°	FAF ALT 3000	DESCENT GR 5.2%	MDA See CAT	TDZE 1201	ALS-LENGTH 855 M	LDA 9646	
242.200	282.000	120.605	125.580		300.900	125.255		

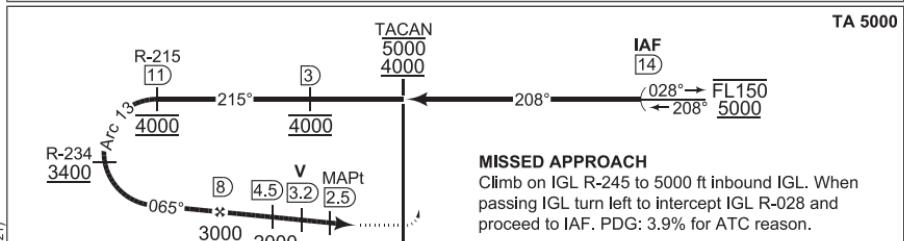
NOTE:-

- a) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
 - b) CAT B: CIRCLING SPEED LIMITED TO 130 KIAS MAX.
 - c) TIMING NOT AUTOHORIZED FOR DEFINING THE MAPT

IAF
48°54.94'N
011°45.43'E



EMERG SAFE ALT 100 NM 13500



CHANGE: VAR, PROCEDURE (140/21)

CATEGORY		A	B	C	D	E
MIPS	TACAN 07R	1560 - 0.9 359 (400-0.9/1.5)		1560 - 0.9 359 (400-0.9/1.6)		1570 - 1.0 369 (400-1.0/1.7)
	a CIRCLING	1700 - 2.3 497 (500-2.3)	b 1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	
PAR 07R		1401 - 0.8 200 (200-0.8/1.2)		GS 3.0°		

TACAN RWY 07R

48°42.94'N
011°32.02'E

INGOLSTADT/MANCHING (ETSI)

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

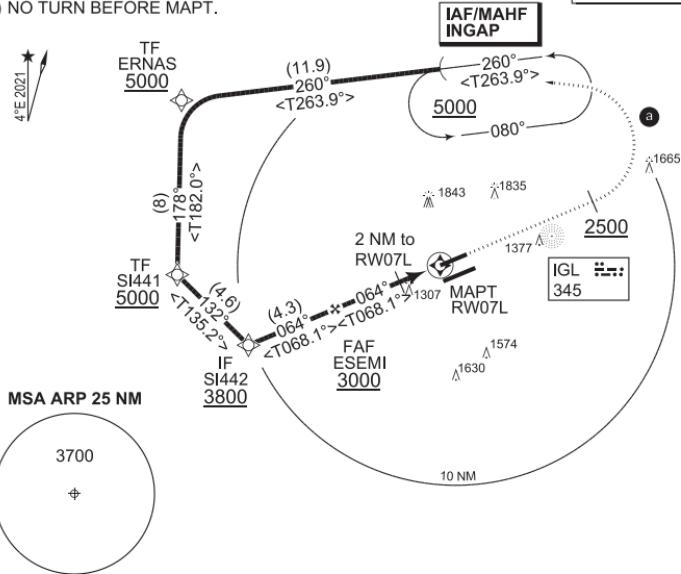
RNAV (GNSS) RWY 07L
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000	120.605	125.580	INGO TOWER 300.900	125.255
NDB IGL 345	APP COURSE 064°	FAF ALT 3000	GS 3.1°	MDA See CAT	TDZE 1196

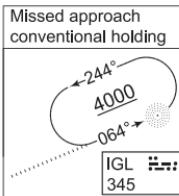
NOTE:

- a) MISSED APCH TURN LIMITED TO KIAS 220.
- b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- c) CAT B: CIRCLING SPEED LIMITED TO 130 KIAS MAX
- d) GPS QUALIFICATION REQUIRED.
- e) NO TURN BEFORE MAPT.

IFR PROFILES WITHIN
AIRSPACE CLASS "E"
WATCH OUT FOR VFR
TRAFFIC UNKNOWN TO ATC.

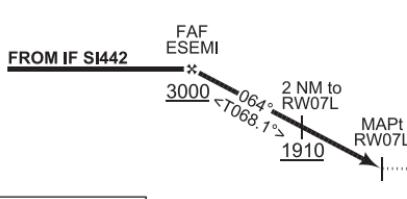


EMERG SAFE ALT 100 NM 13500



Distance THR	5	4	3	2	1
Altitude	2930	2590	2250	1910	1570

TA 5000



MISSED APPROACH

Climb on track 064°. When passing 2500 ft turn left direct INGAP. Climb to 5000 ft and enter holding. [M064, A2500+; L] - INGAP [A5000+]

CONVENTIONAL MISSED APPROACH

Climb inbound IGL NDB. Climb within published holding to 4000 ft.

TCH 50

CAT I	5.2	TDZE 1196
-------	-----	-----------

CATEGORY	A	B	C	D	E
GNSS 07L	1580 - 1.1 384 (400-1.1/1.5)		1590 - 1.1 394 (400-1.1/1.8)	1610 - 1.2 414 (500-1.2/1.9)	NOT AUTHORIZED
• CIRCLING	1700 - 2.3 497 (500-2.3)	• 1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	

MIPS

48°42.94'N
011°32.02'E

INGOLSTADT/MANCHING (ETSI)

INSTRUMENT APPROACH CHART**WAY POINT LIST RWY 07L
INGOLSTADT/MANCHING (ETSI)****RWY 07L from INGAP APPROACH RNAV (GNSS)**

	CODING	DISPLAY
INGAP (IAWP)	48 51 58.00 N 011 31 06.00 E	48 51.967 N 011 31.100 E
ERNAS (TWP)	48 50 40.81 N 011 13 09.67 E	48 50.680 N 011 13.161 E
SI441 (TWP)	48 42 43.00 N 011 12 45.00 E	48 42.717 N 011 12.750 E
SI442 (IWP)	48 39 27.90 N 011 17 37.01 E	48 39.465 N 011 17.617 E
ESEMI (FAWP)	48 41 04.09 N 011 23 38.15 E	48 41.068 N 011 23.636 E
RW07L	48 43 00.00 N 011 30 55.39 E	48 43.000 N 011 30.923 E
INGAP (MAHWP)	48 51 58.00 N 011 31 06.00 E	48 51.967 N 011 31.100 E

Threshold Coordinates

RWY 07L	48 43 00.00 N 011 30 55.38 E	48 43.000 N 011 30.923 E
---------	------------------------------	--------------------------

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

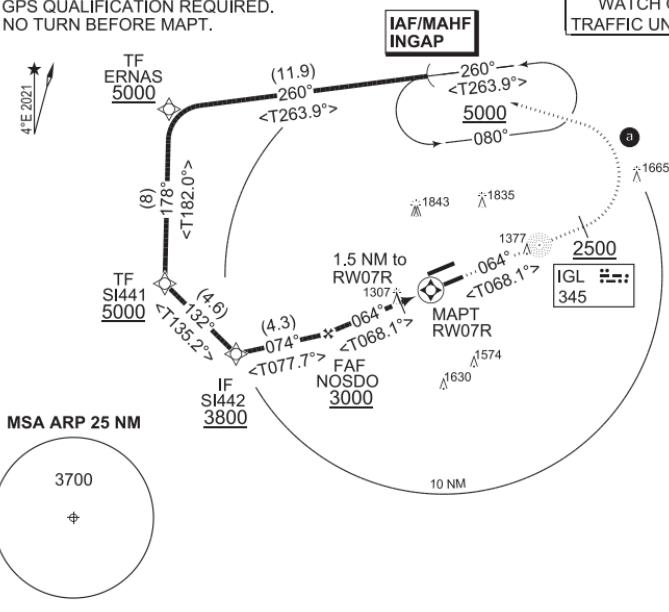
RNAV (GNSS) RWY 07R
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000	120.605	125.580	INGO TOWER 300.900	125.255
NDB IGL 345	APP COURSE 064°	FAF ALT 3000	GS 3.2°	MDA See CAT	TDZE 1201

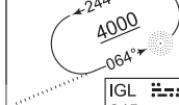
NOTE:

- a) MISSED APCH TURN LIMITED TO 220 KIAS.
- b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- c) CAT B: CIRCLING SPEED LIMITED TO 130 KIAS MAX.
- d) GPS QUALIFICATION REQUIRED.
- e) NO TURN BEFORE MAPT.

IFR PROFILES WITHIN
AIRSPACE CLASS "E"
WATCH OUT FOR VFR
TRAFFIC UNKNOWN TO ATC.



Missed approach
conventional holding



Distance THR	5	4	3	2	1
Altitude	2960	2620	2280	1940	1600

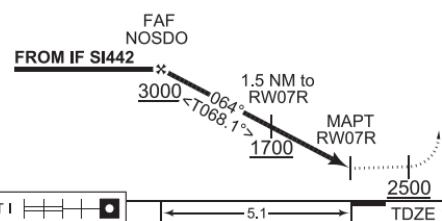
TA 5000

MISSED APPROACH

Climb on track 064°. When passing 2500 ft turn left direct INGAP. Climb to 5000 ft and enter holding. [M064, A2500+; L] - INGAP [A5000+]

CONVENTIONAL MISSED APPROACH

Climb straight ahead inbound IGL NDB. Climb within published holding to 4000 ft.



TCH 50

CAT I	5.1	TDZE 1201
-------	-----	-----------

CATEGORY	A	B	C	D	E
GNSS 07R	1560 - 0.9 359 (400-0.9/1.5)		1560 - 0.9 359 (400-0.9/1.6)	1580 - 1.0 379 (400-1.0/1.7)	1620 - 1.2 419 (500-1.2/1.9)
b) CIRCLING	1700 - 2.3 497 (500-2.3)	1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	

INSTRUMENT APPROACH CHART

RWY 07R from INGAP APPROACH RNAV (GNSS)

	CODING	DISPLAY
INGAP (IAWP)	48 51 58.00 N 011 31 06.00 E	48 51.967 N 011 31.100 E
ERNAS (TWP)	48 50 40.81 N 011 13 09.67 E	48 50.680 N 011 13.161 E
SI441 (TWP)	48 42 43.00 N 011 12 45.00 E	48 42.717 N 011 12.750 E
SI442 (IWP)	48 39 27.90 N 011 17 37.01 E	48 39.465 N 011 17.617 E
NOSDO (FAWP)	48 40 22.84 N 011 23 58.51 E	48 40.381 N 011 23.975 E
RW07R (MAWP)	48 42 16.48 N 011 31 07.26 E	48 42.275 N 011 31.121 E
INGAP (MAHWP)	48 51 58.00 N 011 31 06.00 E	48 51.967 N 011 31.100 E

Threshold Coordinates

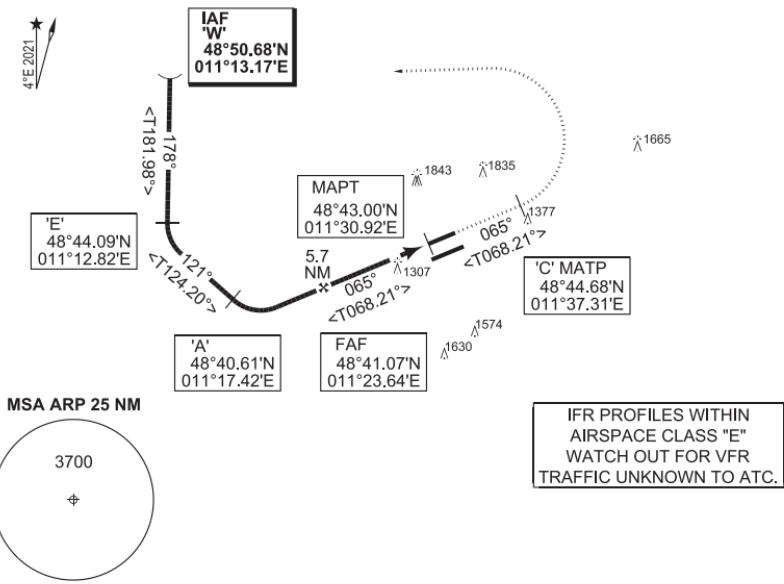
RWY 07R	48 42 16.48 N 011 31 07.26 E	48 42.275 N 011 31.121 E
---------	------------------------------	--------------------------

MIPS
INSTRUMENT APPROACH CHART IAA RWY 07L
INGOLSTADT/MANCHING (ETSI)

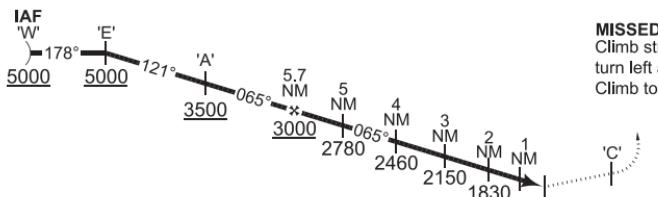
MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
APP COURSE 065°	FAF ALT 3000	DESCENT GR 5.2% MDA See CAT

NOTE:

- a) DISREGARD PAPI.
- b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- c) CIRCLING CAT B SPEED LIMITED TO 130 KIAS MAX.



TA 5000



MISSED APPROACH
Climb straight ahead to 'C'. At 'C' turn left and proceed direct to IAF.
Climb to 5000 ft.

CAT I	A	B	C	D	E
IAA 07L 3.4%	1650 - 1.4 454 (500-1.4/1.5)			1650 - 1.4 454 (500-1.4/2.1)	
IAA 07L 2.5%	1650 - 1.4 454 (500-1.4/1.5)		1670 - 1.5 474 (500-1.5/2.2)	1690 - 1.5 494 (500-1.5/2.3)	1720 - 1.7/524 (600-1.7/2.4)
• CIRCLING	1700 - 2.3 497 (500-2.3)	1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	

IAA RWY 07L

48°42.94'N
011°32.02'E INGOLSTADT/MANCHING (ETSI)

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

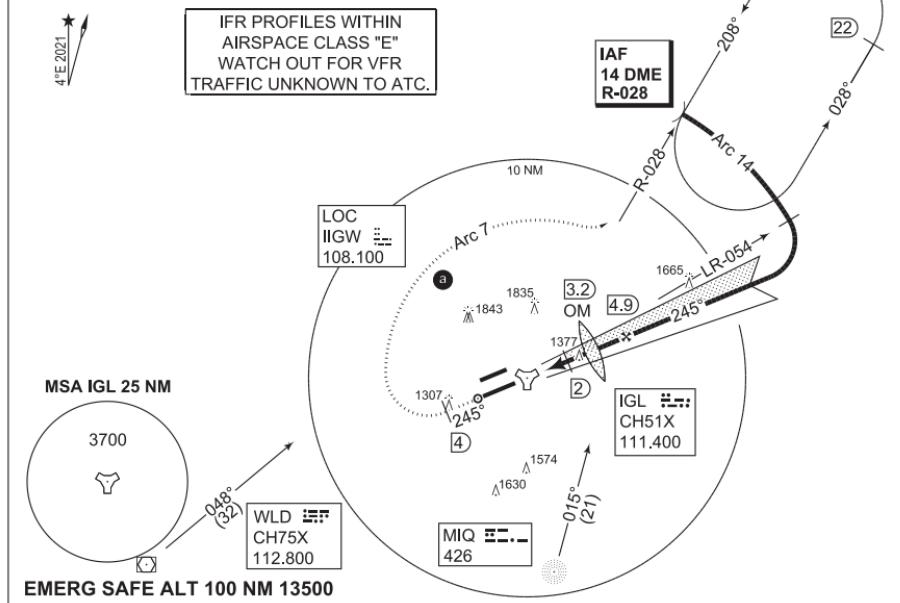
ILS X or LOC RWY 25L
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
TACAN/LOCALIZER IGL CH51X/IIGW 108.100	APP COURSE 245°	GS INTCP ALT 3000 GS 3.0° / 5.2% DA See CAT

NOTE:

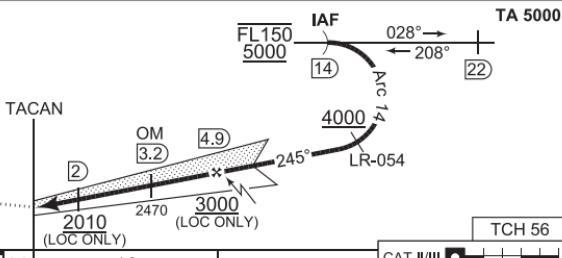
- a) MISSED APCH TURN LIMITED TO 230 KIAS MAX.
- b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- c) CIRCLING CAT B SPEED LIMITED TO 130 KIAS.
- d) DME REQUIRED

IAF
49°54.94'N
011°45.43'E



MISSED APPROACH

Climb on IGL track 245° to altitude 5000 ft. At IGL R-245/4 DME turn right to intercept Arc 7. Intercept IGL R-028 and proceed to IAF.



CHANGE: VAR, PROCEDURE (14/21)

CATEGORY	A	B	C	D	E
ILS 25L	1397 - 0.8 550 200 (200-0.8/1.2)				1443 - 0.8 550 246 (300-0.8/1.3)
LOC 25L	1550 - 0.9 353 (400-0.9/1.5)			1550 - 0.9 353 (400-0.9/1.6)	
(a) CIRCLING	1700 - 2.3 497 (500-2.3)	1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	

ILS X or LOC RWY 25L

48°42.94'N
011°32.02'E
INGOLSTADT/MANCHING (ETSI)

**PANS-OPS
INSTRUMENT APPROACH CHART**

AD ELEV 1203

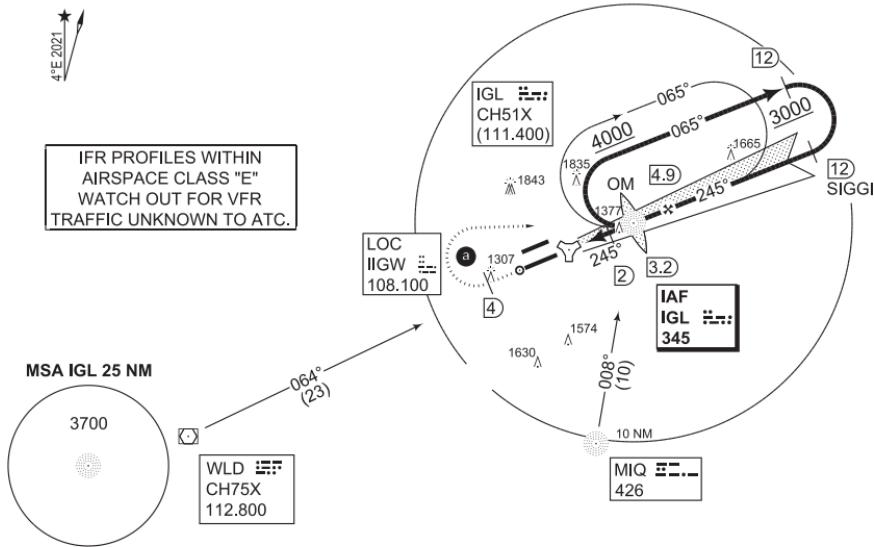
**ILS Y or LOC RWY 25L
INGOLSTADT/MANCHING (ETSI)**

INSTRUMENTATION FOR CHARTING		INTEGRATED APPROXIMATING (ECA)					
MUENCHEN RADAR	INGO RADAR	INGO TOWER					
242.200	282.000	120.605	125.580		300.900	125.255	
NDB/TACAN/LOCALIZER	APP COURSE	GS	INTCP ALT	GS	DA	TDZE	LDA
IGL 345/IGL CH51X/IIWG 108.100	245°	3000	3.0° / 5.2%	See CAT	1197	900 M	9646

NOTE:

- a) MISSED APCH TURN LIMITED TO KIAS 210 MAX.
 - b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
 - c) CAT B: CIRCLING SPEED LIMITED TO 130 KIAS MAX.
 - d) BASE TURN 210 KIAS MAX.
 - e) DME REQUIRED

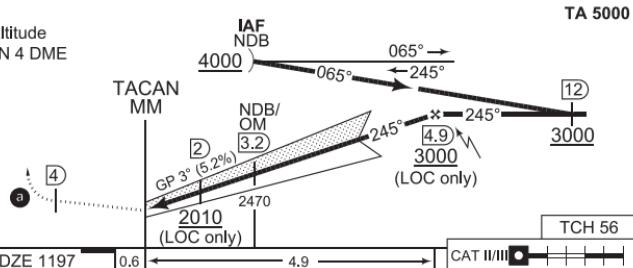
IAF
48°44.26'N
011°38.67'E



EMERG SAFE ALT 100 NM 13500

MISSED APPROACH

Climb on IGL NDB track 245° to altitude 4000 ft. When passing IGL TACAN 4 DME turn right inbound IGL NDB.



CATEGORY	A	B	C	D	E
ILS 25L		1397 - 0.8 550 200 (200-0.8/1.2)			1443 - 0.8 550 246 (300-0.8/1.3)
LOC 25L	1550 - 0.9 353 (400-0.9/1.5)		1550 - 0.9 353 (400-0.9/1.6)		
b CIRCLING	1700 - 2.3 497 (500-2.3)	c 1710 - 2.4 507 (500-2.4)	2480 - 5.0 1277 (1200-5.0)	2630 - 5.0 1427 (1500-5.0)	

ILLINOIS STATE HIGHWAY 25

INGOLSTADT/MANCHING (ETSI)

**MIPS
INSTRUMENT APPROACH CHART**

AD ELEV 1203

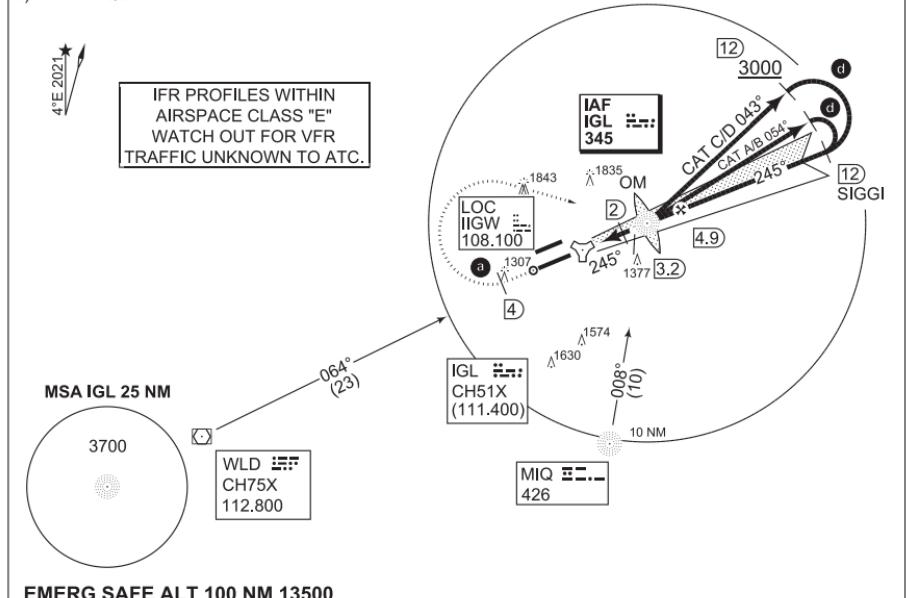
**ILS Z or LOC RWY 25L
INGOLSTADT/MANCHING (ETSI)**

MUENCHEN RADAR 242.200	INGO RADAR 282.000	120.605	125.580	INGO TOWER 300.900	125.255
NDB/TACAN/LOCALIZER IGL 345/IGL CH51X/IIGW 108.100	APP COURSE 245°	GS INTCP ALT 3000	GS 3.0° / 5.2%	DA See CAT	TDZE 1197

NOTE:

- a) MISSED APCH TURN LIMITED TO KIAS 210.
- b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- c) CAT B: CIRCLING SPEED LIMITED TO 130 KIAS MAX.
- d) BASE TURN 210 KIAS MAX.
- e) DME REQUIRED

IAF
48°44.26'N
011°38.67'E



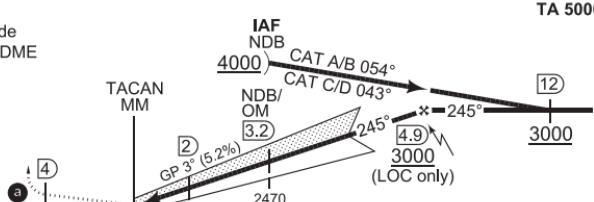
③ MISSED APPROACH

Climb on IGL NDB track 245° to altitude 4000 ft. When passing IGL TACAN 4 DME turn right inbound IGL NDB.

TA 5000

LOC: FAF - MAPt 4.9 NM

Knots	60	90	120	150	180
min/sec	4:54	3:17	2:27	1:58	1:38



MIPS	CATEGORY	A	B	C	D	E
ILS 25L			1397 - 0.8 550 200 (200-0.8/1.2)			1443 - 0.8 550 246 (300-0.8/1.3)
LOC 25L		1550- 0.9 353 (400-0.9/1.5)		1550- 0.9 353 (400-0.9/1.6)		
④ CIRCLING		1700 - 2.3 497 (500-2.3)	1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

TACAN RWY 25L
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
TACAN IGL CH51X APP COURSE 245°	FAF ALT 3000	DESCENT GR 5.2%

MDA

1570

TDZE

1197

ALS-LENGTH

900 M

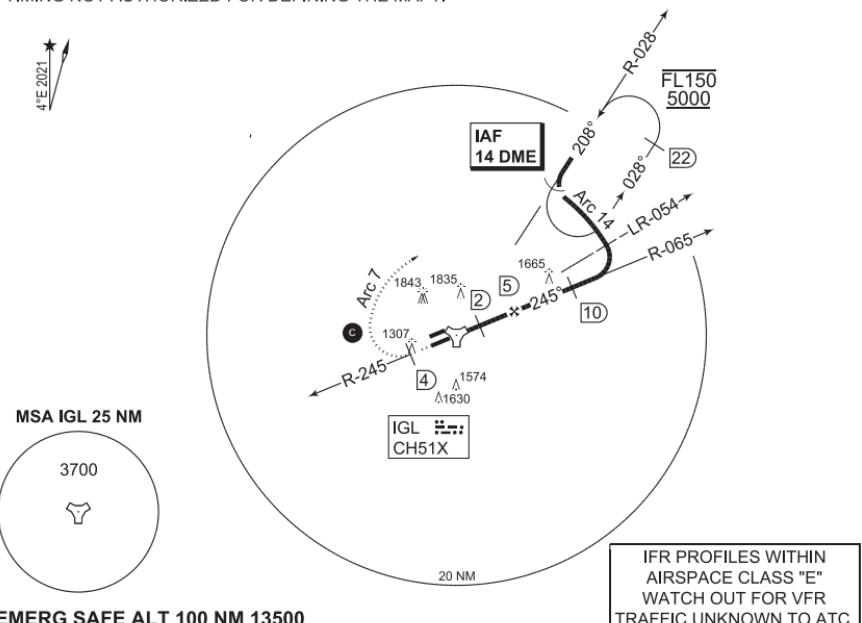
LDA

9646

NOTE:

- a CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- b CAT B: CIRCLING SPEED LIMITED TO 130 KIAS MAX.
- c MISSED APCH TURN 230 KIAS MAX.
- d TIMING NOT AUTHORIZED FOR DEFINING THE MAPT.

IAF
48°54.94'N
011°45.43'E



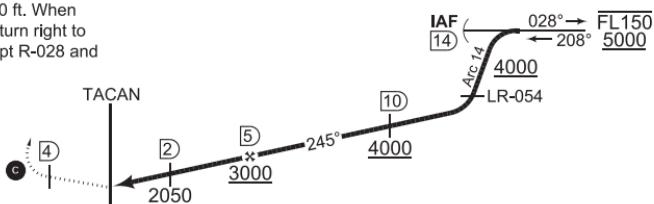
EMERG SAFE ALT 100 NM 13500

IFR PROFILES WITHIN
AIRSPACE CLASS "E"
WATCH OUT FOR VFR
TRAFFIC UNKNOWN TO ATC.

MISSED APPROACH

Climb on R-245 to 5000 ft. When passing R-245/4 DME turn right to intercept Arc 7. Intercept R-028 and proceed to IAF.

TA 5000



TDZE 1197

5.6

CAT II/III

CHANGE: VAR, PROCEDURE (14/21)

CATEGORY	A	B	C	D	E
TACAN 25L	1570 - 1.0 373 (400-1.0/1.5)			1570 - 1.0 373 (400-1.0/1.7)	
MIPS	a CIRCLING	1700 - 2.3 497 (500-2.3)	b 1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)

TACAN RWY 25L

48°42.94'N
011°32.02'E

INGOLSTADT/MANCHING (ETSI)

Zentrale Luftfahrtbehörde 20. Mai 2021

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

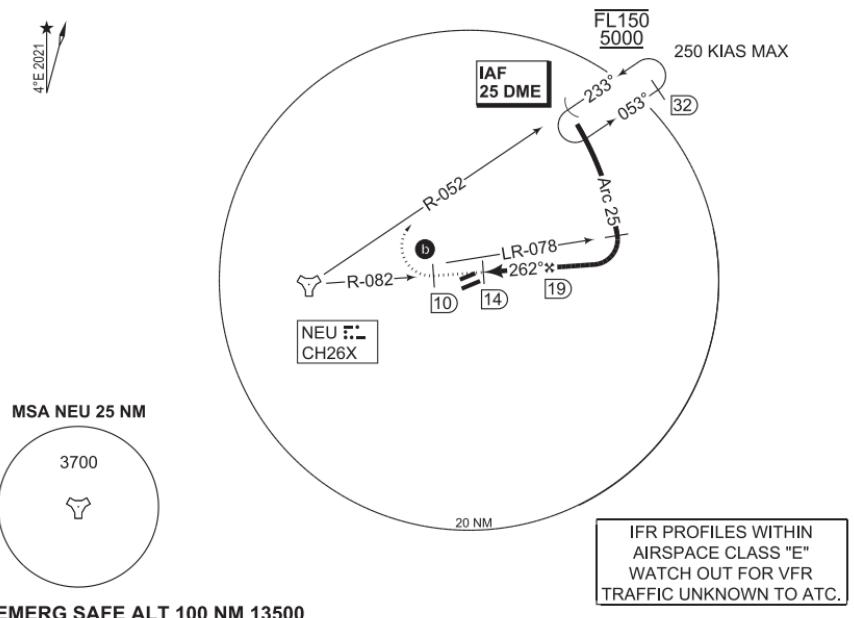
TACAN RWY 25R
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000	120.605	125.580	INGO TOWER 300.900	125.255
TACAN NEU CH26X 262°	APP COURSE 3000	FAF ALT 5.2%	DESCENT GR MDA 1960	TDZE 1192	ALS-LENGTH 900 M LDA 8001

NOTE:

- a) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- b) MISSED APPROACH TURN LIMITED TO 230 KIAS MAX.
- c) TIMING NOT AUTHORIZED FOR DEFINING THE MAPT.

IAF
48°56.65'N
011°44.10'E

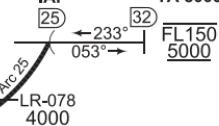


EMERG SAFE ALT 100 NM 13500

MISSED APPROACH

Climb on NEU R-082 inbound NEU. When passing DME 10 turn right to intercept NEU R-052 outbound and proceed to IAF, climb to 5000 ft.

IAF TA 5000



TDZE 1192 0.78 5.76 CAT I

CATEGORY	A	B	C	D	E
TACAN 25R			1960 - 2.9 768 (800-2.9/3.6)		
MIPS	(a) CIRCLING	1960 - 3.6 797 (800-3.6)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

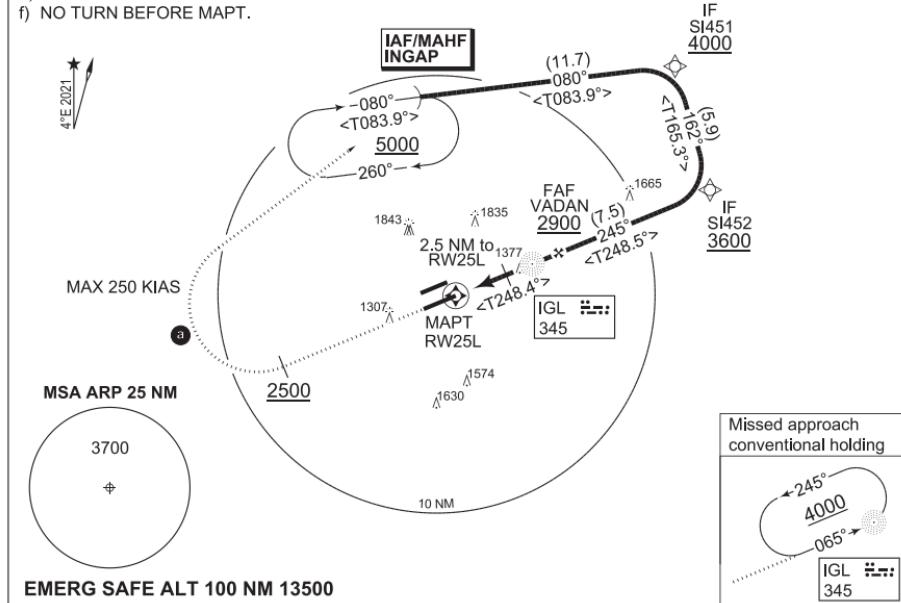
RNAV (GNSS) RWY 25L
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
NDB IGL 345	APP COURSE 245°	FAF ALT 2900

NOTE:

- a) MISSED APCH TURN LIMITED TO 250 KIAS.
- b) CIRCLING: CLIMB WITH MINIMUM 3% (183 FT/NM) FOR ATC REASON.
- c) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- d) CAT B: CIRCLING SPEED LIMITED TO 130 KIAS MAX.
- e) GPS QUALIFICATION REQUIRED.
- f) NO TURN BEFORE MAPT.

IF PROFILES WITHIN
AIRSPACE CLASS "E"
WATCH OUT FOR VFR
TRAFFIC UNKNOWN TO ATC.



EMERG SAFE ALT 100 NM 13500

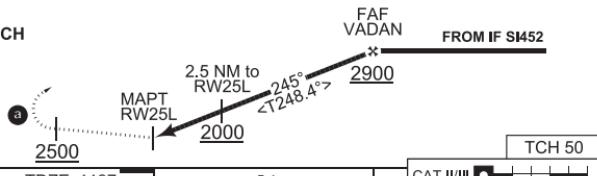
MISSED APPROACH

Climb on track 245°, when passing 2500 ft turn right direct INGAP. Climb to 5000 ft and enter holding.
[M245, A2500+; R] - INGAP [A5000+]

TA 5000	Distance THR	5	4	3	2	1
	Altitude	2870	2540	2210	1880	1550

CONVENTIONAL MISSED APPROACH

Climb on track 245°, when passing 2500 ft turn right inbound IGL NDB and enter published holding to 4000 ft.



TDZE 1197 ← 5.1 → CAT II/III

CATEGORY	A	B	C	D	E
GNSS 25L	1570 - 1.0 373 (400-1.0/1.5)		1570 - 1.0 373 (400-1.0/1.7)		1610 - 1.2 413 (500-1.2/1.9)
b c CIRCLING	1700 - 2.3 497 (500-2.3)	d 1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	

RWY 25L from INGAP APPROACH RNAV (GNSS)

	CODING	DISPLAY
INGAP (IAWP)	48 51 58.00 N 011 31 06.00 E	48 51.967 N 011 31.100 E
SI451 (TWP)	48 53 11.00 N 011 48 47.00 E	48 53.183 N 011 48.783 E
SI452 (IWP)	48 47 30.24 N 011 51 02.81 E	48 47.504 N 011 51.047 E
VADAN (FAWP)	48 44 44.81 N 011 40 30.29 E	48 44.747 N 011 40.505 E
RW25L (MAWP)	48 42 51.76 N 011 33 20.84 E	48 42.863 N 011 33.347 E
INGAP (MAHWP)	48 51 58.00 N 011 31 06.00 E	48 51.967 N 011 31.100 E

Threshold Coordinates

RWY 25L	48 42 51.76 N 011 33 20.84 E	48 42.863 N 011 33.347 E
---------	------------------------------	--------------------------

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

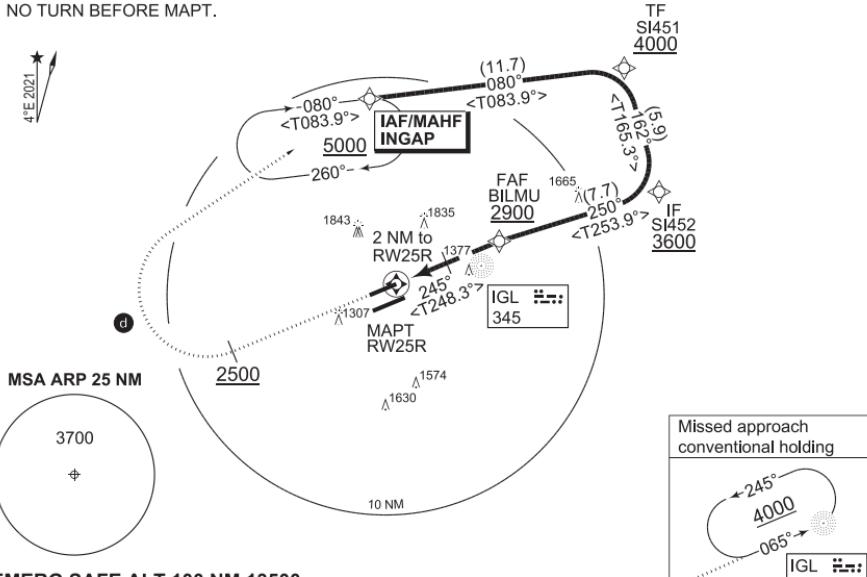
RNAV (GNSS) RWY 25R
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
NDB IGL 345	APP COURSE 245°	FAF ALT 2900

NOTE:

- a) CIRCLING: CLIMB WITH MINIMUM 3% (183 FT/NM) FOR ATC REASON.
- b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- c) CAT B: CIRCLING SPEED LIMITED TO 130 KIAS MAX.
- d) MISSED APCH TURN LIMITED TO 250 KIAS.
- e) GPS QUALIFICATION REQUIRED.
- f) NO TURN BEFORE MAPT.

IFR PROFILES WITHIN
AIRSPACE CLASS "E"
WATCH OUT FOR VFR
TRAFFIC UNKNOWN TO ATC.



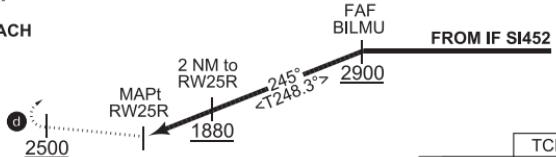
EMERG SAFE ALT 100 NM 13500

MISSED APPROACH

Climb on track 245°, when passing 2500 ft turn right direct INGAP. Climb to 5000 ft and enter holding.
[M245, A2500+; R] - INGAP [A5000+]

CONVENTIONAL MISSED APPROACH

Climb on track 245°, when passing 2500 ft turn right inbound IGL NDB and enter published holding to 4000 ft.



CATEGORY	A	B	C	D	E
	1590 - 1.2 398 (400-1.2/1.5)		1590 - 1.2 398 (400-1.2/1.8)	1610 - 1.2 418 (500-1.2/1.9)	1650 - 1.4 458 (500-1.4/2.1)
MIPS	a) CIRCLING	1700 - 2.3 497 (500-2.3)	c) 1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)
	b) CIRCLING				

RNAV (GNSS) RWY 25R

48°42.94'N
011°32.02'E

INGOLSTADT/MANCHING (ETSI)

RWY 25R from INGAP APPROACH RNAV (GNSS)

	CODING	DISPLAY
INGAP (IAF)	48 51 58.00 N 011 31 06.00 E	48 51.967 N 011 31.100 E
SI451 (TF)	48 53 11.00 N 011 48 47.00 E	48 53.183 N 011 48.783 E
SI452 (IF)	48 47 30.24 N 011 51 02.81 E	48 47.504 N 011 51.047 E
BILMU (FAF)	48 45 22.42 N 011 39 55.81 E	48 45.374 N 011 39.930 E
RW25R (MAPt)	48 43 29.28 N 011 32 46.20 E	48 43.488 N 011 32.770 E
INGAP (MAHF)	48 51 58.00 N 011 31 06.00 E	48 51.967 N 011 31.100 E

Threshold Coordinates

RWY 25R	48 43 29.28 N 011 32 46.20 E	48 43.488 N 011 32.770 E
---------	------------------------------	--------------------------

MIPS
INSTRUMENT APPROACH CHART

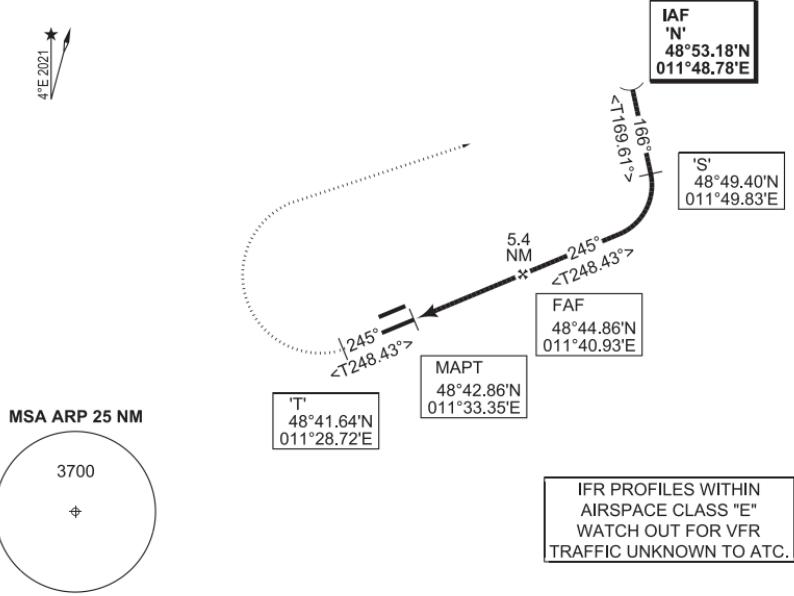
AD ELEV 1203

IAA RWY 25L
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
APP COURSE 245°	FAF ALT 2900	DESCENT GR 5.2% MDA 1650 TDZE 1197 ALS-LENGTH 900 M LDA 9646

NOTE:

- a) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- b) CIRCLING CAT B SPEED LIMITED TO 130 KIAS MAX.
- c) DISREGARD PAPI.

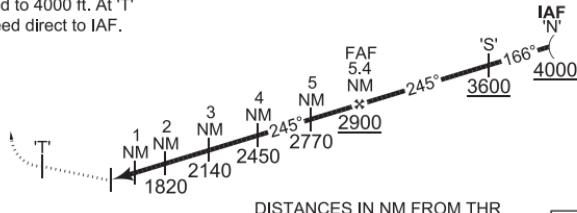


EMERG SAFE ALT 100 NM 13500

MISSSED APPROACH

Climb straight ahead to 4000 ft. At 'T' turn right and proceed direct to IAF.

TA 5000



TCH 50

TDZE 1197

CAT II/III

CATEGORY	A	B	C	D	E
ARA/IAA 25L	1650 - 1.4 453 (500-1.4/1.5)			1650 - 1.4 453 (500-1.4/2.1)	
b) CIRCLING	1700 - 2.3 497 (500-2.3)	1710 - 2.4 507 (600-2.4)		2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)

MIPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

IAA RWY 25R
INGOLSTADT/MANCHING (ETSI)

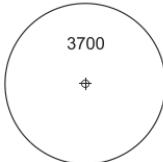
MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
APP COURSE 245°	FAF ALT 2900	DESCENT GR 5.2% MDA 1650 TDZE 1192 ALS-LENGTH 900 M LDA 8001

NOTE:

- a) DISREGARD PAPI
- b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R
- c) CIRCLING CAT B SPEED LIMITED TO MAX 130 KIAS

4E 2021
↗

MSA ARP 25 NM

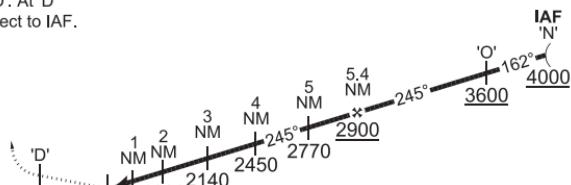


EMERG SAFE ALT 100 NM 13500

MISSSED APPROACH

Climb straight ahead to 'D'. At 'D'
turn right and proceed direct to IAF.
Climb to 4000 ft.

TA 5000



DISTANCES IN NM FROM THR

TDZE 1192	CAT I				
CATEGORY	A	B	C	D	E
IAA 25R	1650 - 1.4 458 (500-1.4/1.5)			1650 - 1.4 458 (500-1.4/2.1)	
(b) CIRCLING	1700 - 2.3 497 (500-2.3)	(c) 1710 - 2.4 507 (600-2.4)		2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

NDB Y RWY 25L
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
TACAN/NDB IGL CH51X/IGL 345	APP COURSE 244°	FAF ALT 2400

DESCENT GR
5.2%

MDA
1570

TDZE
1197

ALS-LENGTH
900 M

LDA
9646

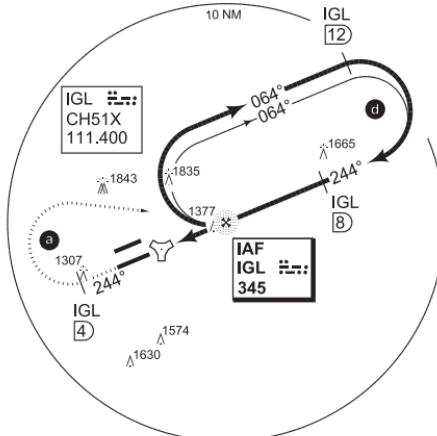
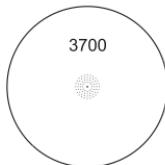
NOTE:

- a) MISSED APCH TURN LIMITED TO 210 KIAS MAX.
- b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
- c) CIRCLING CAT B SPEED LIMITED TO 130 KIAS.
- d) RACETRACK SPEED LIMITED TO 210 KIAS MAX.
- e) DME REQUIRED

IAF
48°44.26'N
011°38.67'E



MSA IGL 25 NM



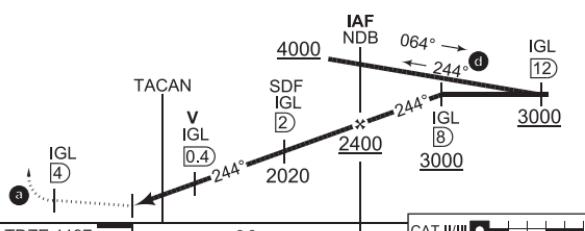
IFR PROFILES WITHIN
AIRSPACE CLASS "E"
WATCH OUT FOR VFR
TRAFFIC UNKNOWN TO ATC.

EMERG SAFE ALT 100 NM 13500

MISSED APPROACH

Climb on IGL NDB track 244° to altitude 4000 ft. When passing IGL TACAN 4 DME turn right inbound IGL NDB.

TA 5000



CHANGE: VAR PROCEDURE (140/21)

FAF - MAPt 3.8 NM

Knots 60 90 120 150 180

min/sec 3:48 2:32 1:54 1:31 1:16

TDZE 1197

TDZE 1197

3.8

CAT II/III

CATEGORY	A	B	C	D	E
S-NDB 25L	1570 - 1.0 373 (400-1.0/1.5)		1570 - 1.0 373 (400-1.0/1.7)		NOT AUTHORIZED
b CIRCLING	1700 - 2.3 497 (500-2.3)	c 1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	

NDB Y RWY 25L

48°42.94'N
011°32.02'E

INGOLSTADT/MANCHING (ETSI)

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

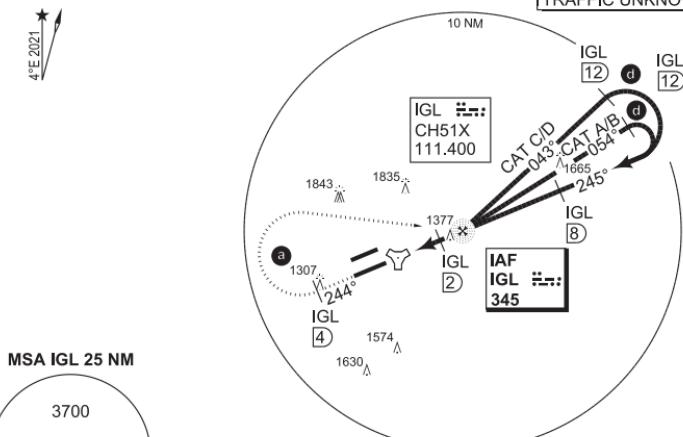
NDB Z RWY 25L
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
TACAN/NDB IGL CH51X/IGL 345	APP COURSE 245°	FAF ALT 2400

- NOTE:
 a) MISSED APCH TURN LIMITED TO 210 KIAS MAX.
 b) CIRCLING NOT AUTHORIZED NORTH OF RWY 07L/25R.
 c) CIRCLING CAT B SPEED LIMITED TO 130 KIAS.
 d) BASE TURN SPEED LIMITED TO 210 KIAS MAX.
 e) DME REQUIRED

IAF
49°44.26'N
011°38.67'E

IFR PROFILES WITHIN
AIRSPACE CLASS "E"
WATCH OUT FOR VFR
TRAFFIC UNKNOWN TO ATC.



MSA IGL 25 NM

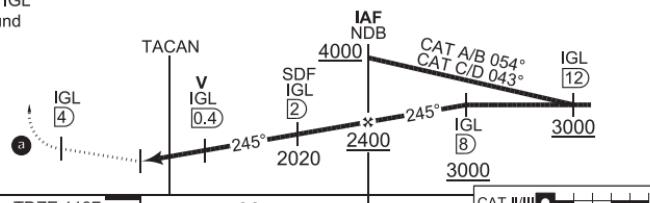
3700

EMERG SAFE ALT 100 NM 13500

MISSED APPROACH

Climb on IGL NDB track 244° to altitude 4000 ft. When passing IGL TACAN 4 DME turn right inbound IGL NDB.

TA 5000



FAF - MAPt 3.8 NM					
Knots	60	90	120	150	180
min:sec	3:48	2:32	1:54	1:31	1:16

TDZE 1197 ← 3.8 → CAT II/III

CATEGORY	A	B	C	D	E
S-NDB 25L	1570 - 1.0 373 (400-1.0/1.5)		1570 - 1.0 373 (400-1.0/1.7)		NOT AUTHORIZED
b) CIRCLING	1700 - 2.3 497 (500-2.3)	1710 - 2.4 507 (600-2.4)	2480 - 5.0 1277 (1300-5.0)	2630 - 5.0 1427 (1500-5.0)	

PANS-OPS
INSTRUMENT APPROACH CHART

AD ELEV 1203

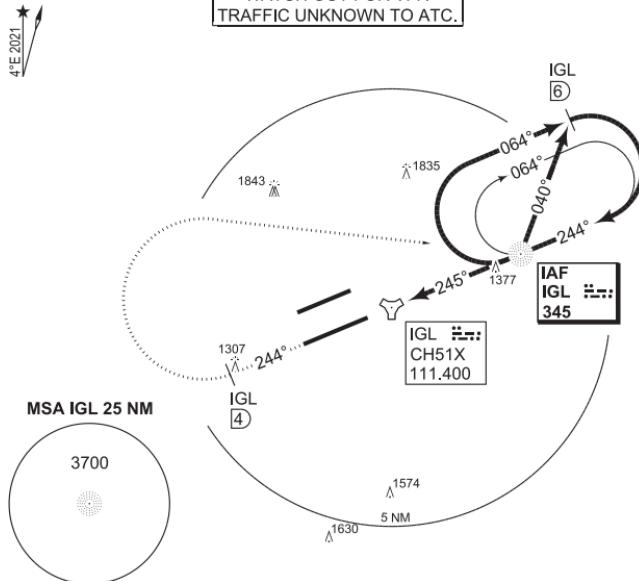
COPTER NDB RWY 25L
INGOLSTADT/MANCHING (ETSI)

MUENCHEN RADAR 242.200	INGO RADAR 282.000 120.605 125.580	INGO TOWER 300.900 125.255
TACAN/NDB IGL CH51X/IGL 345	APP COURSE 245°	FAF ALT 2400

- NOTE:
a) DME REQUIRED
b) DISREGARD PAPI

IFR PROFILES WITHIN
AIRSPACE CLASS "E"
WATCH OUT FOR VFR
TRAFFIC UNKNOWN TO ATC.

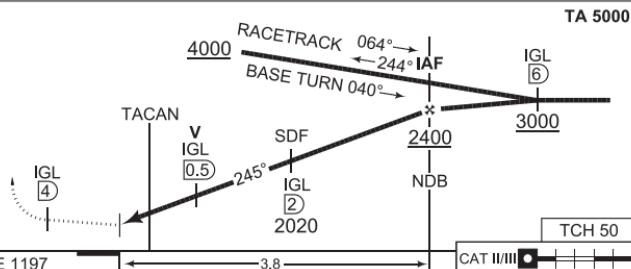
IAF
48°44.26'N
011°38.67'E



EMERG SAFE ALT 100 NM 13500

MISSSED APPROACH

Climb on IGL NDB track 244° to IGL 4 DME. Turn right inbound IGL NDB and enter Holding. Climb to 4000 ft.



FAF - MAPt 3.8 NM

Knots	50	70	90	110
min/sec	4:34	3:15	2:31	2:04

TDZE 1197

1570 - 0.4 373 (400-0.4/0.8)