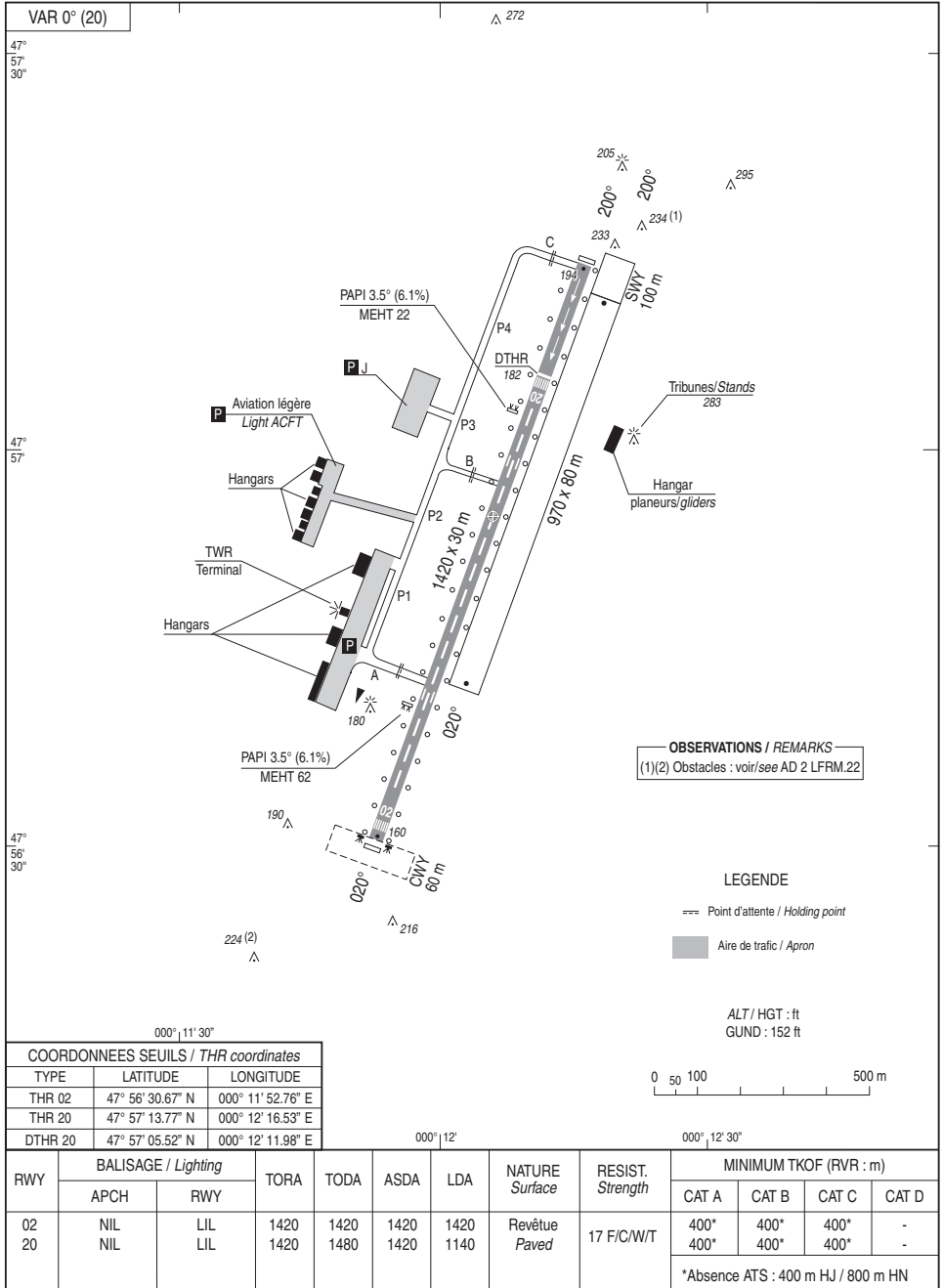


CARTE D'AERODROME
Aerodrome chart

AFIS : LE MANS Information 125.900
Absence ATS :
A/A 125.900 (FR uniquement/only)
Obtenir/Obtain QNH TOURS auprès de/from PARIS ACC

LE MANS ARNAGE
47 56 55 N - 000 12 06 E
ALT AD : 194 (7 hPa)



POINTS / REPERES ESSENTIELS DES PROCEDURES

Waypoints / Procedures main fixes

Identification	Coordonnées <i>Coordinates</i>	RNAV	CONV
MATOT	REF Enr 4.3	x	
MAVUK	REF Enr 4.3	x	
MAPEB	REF Enr 4.3	x	
LM IAF	REF AD 1.5		x
FRM02	47°51'14.6" N 000°08'58.8" E	x	
RM410	48°03'04.2" N 000°15'30.3" E	x	
RM502	48°07'01.0" N 000°25'39.4" E	x	
RM504	48°10'29.3" N 000°11'39.2" E	x	
IRM20	48°08'45.4" N 000°18'39.5" E	x	
FRM20	48°04'04.4" N 000°16'03.5" E	x	
RW20	47°57'05.50" N 000°12'12.00" E	x	
RW02	47°56'30.67" N 000°11'52.76" E	x	

Données complémentaires à la page DATA 01

IDENTIFICATION	COORDONNEES	RNAV	CONV
MATOT	47°46'13.7"N - 000°14'08.0"E	X	
MAVUK	47°47'57.8"N - 000°07'10.8"E	X	
MAPEB	47°49'41.4"N - 000°00'13.1"E	X	
LM IAF	47°53'36.9" N - 000°10'17.0" E		X

APPROCHE AUX INSTRUMENTS

LE MANS ARNAGE

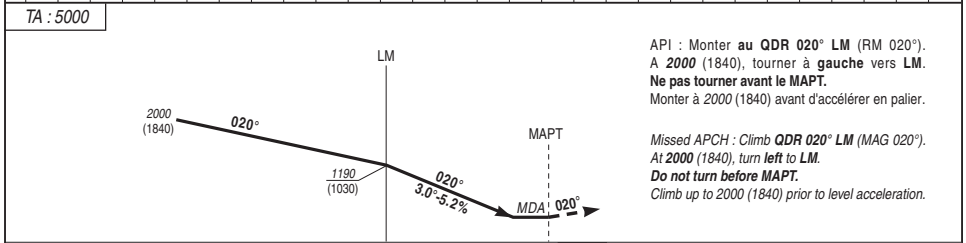
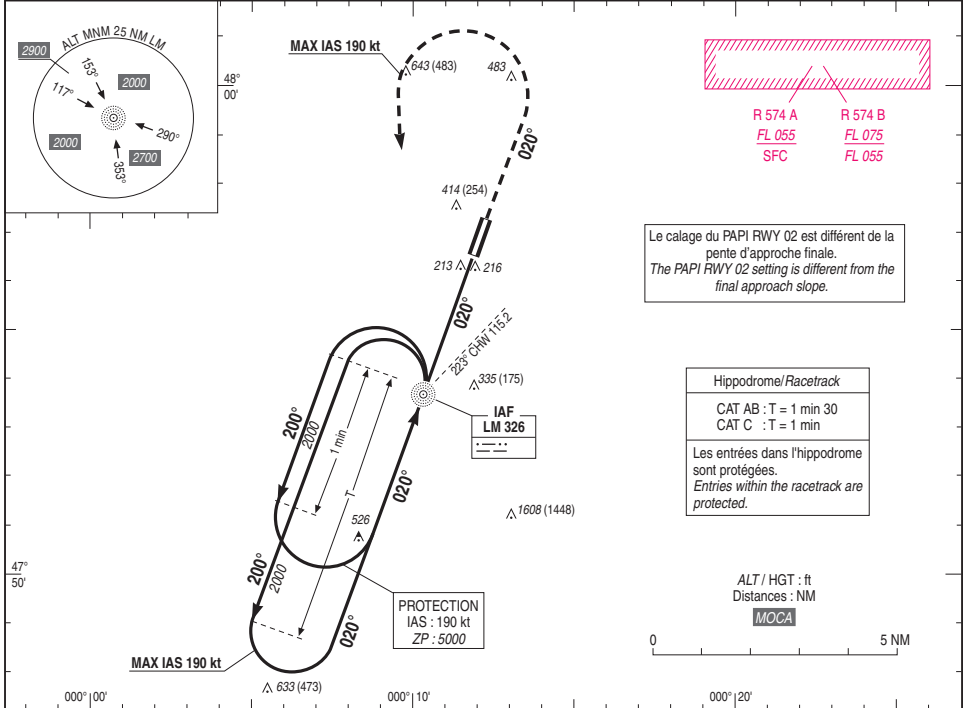
Instrument approach
CAT A B C

NDB RWY 02

ALT AD : 194, THR : 160 (6 hPa)

APP : NIL
TWR : NIL
AFIS : LE MANS Information 125.900
Absence ATS : A/A 125.900 (FR uniquement). Obtenir le QNH de TOURS auprès de PARIS ACC.
A/A 125.900 (FR only). Obtain TOURS QNH from PARIS ACC.

VAR
0°
(20)



(NM) → THR 3.1 0.5

MNM AD : distances verticales en pieds, RVR et VIS en mètres / vertical distances in feet, RVR and VIS in metres. REF HGT : ALT THR

CAT	NDB			MVL / Circling (1)		MVL / Circling absence ATS sans/without QNH local (1)	
	MDA (H)	RVR	OCH	MDA (H)	VIS	MDA (H)	VIS
A	590 (430)	2000	421	710 (550)	2000	880 (720)	2000
B				780 (620)	2000	950 (790)	2000
C				1040 (880)	2400	1200 (1040)	2400

Observations / Remarks : (1) MVL interdites à l'Ouest de la piste. Circuit AD RWY 20 main Gauche / Circling prohibited West of RWY. Left hand circuit RWY 20

	70 kt	80 kt	90 kt	100 kt	110 kt	120 kt	130 kt	140 kt	150 kt	160 kt
NDB - THR	3.1 NM	2 min 39	2 min 20	2 min 04	1 min 52	1 min 41	1 min 33	1 min 26	1 min 20	1 min 14
NDB - MAPT	2.6 NM	2 min 14	1 min 57	1 min 44	1 min 34	1 min 25	1 min 18	1 min 12	1 min 07	1 min 02
VSP (ft/min)	380	430	480	540	590	640	700	750	800	860

APPROCHE AUX INSTRUMENTS

LE MANS ARNAGE

Instrument approach

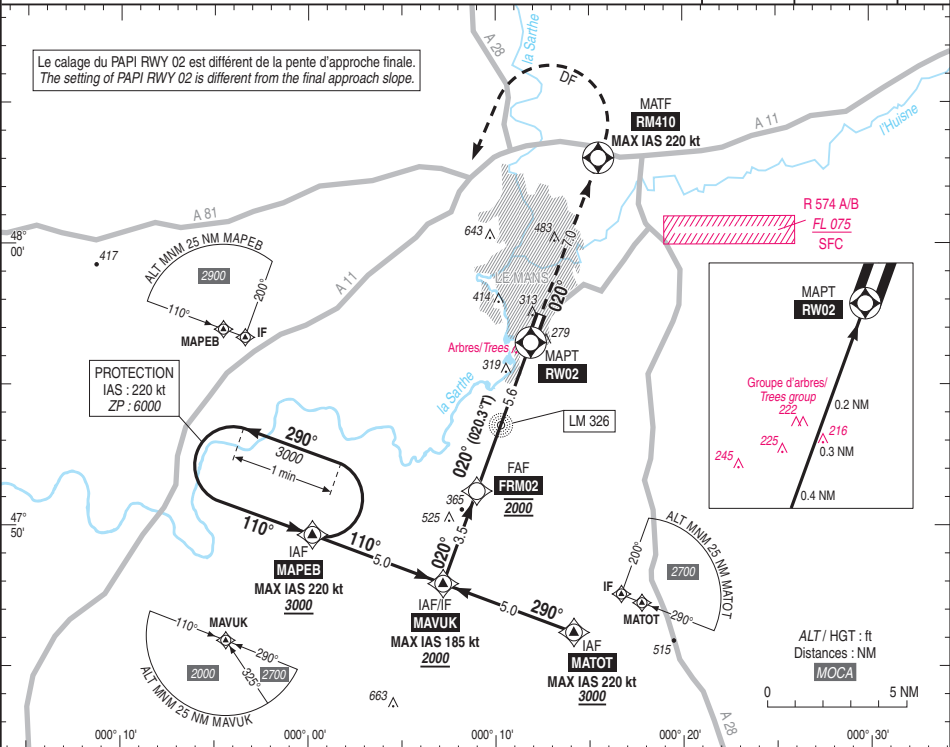
CAT A B C

ALT AD : 194, THR : 160 (6 hPa)

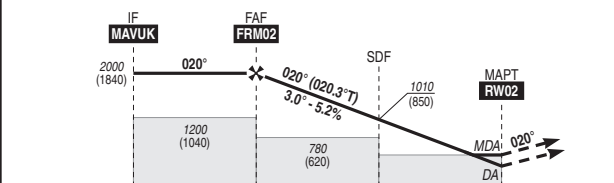
RNP RWY 02

APP : NIL
TWR : NIL
AFIS : LE MANS Information 125.900
Absence ATS : A/A 125.900 (FR uniquement). Obtenir le QNH de TOURS auprès de PARIS ACC.
A/A 125.900 (FR only). Obtain TOURS QNH from PARIS ACC.

RNP APCH	EGNOS Ch 72443 E02A RDH : 50	VAR 0° (20)
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TA : 5000



API : Monter vers **RM410**, puis tourner à gauche direct vers **MAPEB** pour intégrer l'attente à **3000 (2840)**, **MAX IAS 220 kt**.
Monter à **1100 (940)** avant d'accélérer au palier.
Missed APCH : Climb to **RM410** then turn left direct to **MAPEB** to enter the holding at **3000 (2840)**, **MAX IAS 220 kt**.
Climb up to **1100 (940)** prior to level acceleration.

MNM AD : distances verticales en pieds, RVR et VIS en mètres / vertical distances in feet, RVR and VIS in metres. REF HGT : ALT THR

CAT	LPV			LNAV			MVL / Circling (1)		MVL / Circling (1) absence ATS sans/without QNH local		DIST RW02				
	DA (H)	RVR	OCH	MDA (H)	RVR	OCH	MDA (H)	VIS	MDA (H)	VIS		NM	5	4	3
A	460 (300)						710 (550)	1900	880 (720)	1900					
B	460 (300)	1750	300	570 (410)	1900	405	780 (620)	1900	950 (790)	1900					
C	470 (310)						1040 (880)	2400	1200 (1040)	2400					

Observations / Remarks : (1) MVL interdites à l'Ouest de la piste. Circuit AD RWY 20 main Gauche / Circling prohibited West of RWY. Left hand circuit RWY 20
Perte de guidage GNSS durant l'approche / Loss of GNSS guidance during approach : voir / see AIP ENR 1.5

FAF - RW02	5.6 NM	70 kt 4 min 49	85 kt 3 min 58	100 kt 3 min 22	115 kt 2 min 56	130 kt 2 min 36	160 kt 2 min 06
VSP (ft/min)		370	450	530	610	690	850

Identification Procedure		RNP RWY 02				MAG VAR 2020 0.4°E			ref NAVID : ANG		
Leg sequence	P/T	ID	Fly Over	Direction MAG °	Distance (NM or mkt)	Turn	MMI level (FL or AMSL ft)	MAX level (FL or AMSL ft)	MAX IAS (kt)	vertical angle (°) / TCH (m)	Nav Spec
INA MAPEB	IF	MAPEB					3000		220		RNAV1
	TF	MAVUK		110	110.2	L	2000		185		RNAV1
INA MATOT	IF	MATOT					3000		220		RNAV1
	TF	MAVUK		280	280.4	R	2000		185		RNAV1
APCH	IF	MAVUK					2000		185		RNP APCH
	TF	FRM02		20	020.3		2000	2000			RNP APCH
	TF	RW02	Yes	20	020.3					-3.0° / 15	RNP APCH
	CF	RW410	Yes	20	020.3				220		RNP APCH
HLDG	DF	MAPEB				L	3000		220		RNP APCH
		MAPEB									

Input Data	
Parameters	Values
Operation Type	0
SBAS Provider	1
Airport Identifier	LFRM
Runway	02
Runway Direction	0
Approach Performance Designator	0
Route Indicator	
Reference Path Data Selector	0
Reference Path Identifier	E02A
LTP/FTP Latitude	475630.6710N
LTP/FTP Longitude	0001152.7600E
LTP/FTP Ellipsoidal Height (metres)	95
FPAP Latitude	475722.1310N
Delta FPAP Latitude (seconds)	51.4600
FPAP Longitude	0001221.1440E
Delta FPAP Longitude (seconds)	28.3840
Threshold Crossing Height	15
TCH Units Selector	1
Glidepath Angle (degrees)	3
Course Width (metres)	105
Length Offset (metres)	272
HAL	40
VAL	50

Output Data	
Data Block	10 0D 12 06 0C 02 00 00 01 32 30 05 9E 0C 93 14 70 C0 15 00 B6 17 08 92 01 C0 DD 00 2C 81 2C 01 64 22 C8 FA E9 44 11 C0
Calculated CRC Value	E94411C0

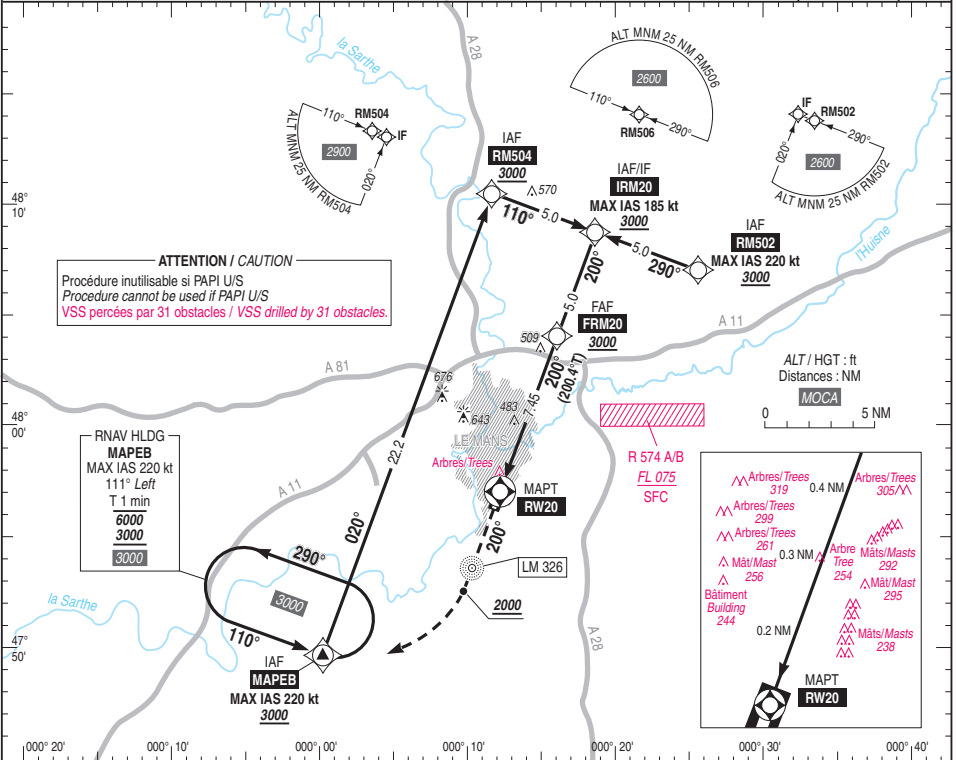
APPROCHE AUX INSTRUMENTS

LE MANS ARNAGE

Instrument approach
CAT A B C
ALT AD : 194. DTHR : 182 (7 hPa)

RNP A

APP : NIL TWR : NIL AFIS : LE MANS Information 125.900 Absence ATS : A/A 125.900 (FR uniquement). Obtenir le QNH de TOURS auprès de PARIS ACC. A/A 125.900 (FR only). Obtenir TOURS QNH from PARIS ACC.	RNP APCH	VAR 0° (20)
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TA : 5000

API : Monter dans l'axe (RM 200°).
A 2000 (1818), tourner à droite direct vers MAPEB en montée vers 3000 (2818).
Ne pas tourner avant le MAPT.
Monter à 2000 (1818) avant d'accélérer en palier.

Missed APCH : Climb straight ahead (MAG 200°).
At 2000 (1818), turn right direct to MAPEB climbing up to 3000 (2818).
Do not turn before MAPT.
Climb up to 2000 (1818) prior to level acceleration.

MNM AD : distances verticales en pieds, RVR et VIS en mètres / vertical distances in feet, RVR and VIS in metres. REF HGT : ALT DTBR

CAT	MVL / Circling (1)		DIST RW20					
	MDA (H)	VIS	NM	7	6	5	4	3
A	760 (580)	1500	ALT	2830	2460	2090	1720	1350
B	780 (600)	1600	(HGT)	(2648)	(2278)	(1908)	(1538)	(1168)
C	1040 (860)	2400						

Observations / Remarks : (1) MVL interdites à l'Ouest de la piste. Circuit AD RWY 02 main Droite / Circling prohibited West of RWY. Right hand circuit RWY 02. Perte de guidage GNSS durant l'approche / Loss of GNSS guidance during approach : voir i see AIP ENR 1.5.

FAF - RW20	7.45 NM	70 kt	80 kt	90 kt	100 kt	110 kt	120 kt	130 kt	140 kt	150 kt	160 kt
VSP (ft/min)		6 min 23	5 min 35	4 min 58	4 min 28	4 min 04	3 min 44	3 min 26	3 min 12	2 min 59	2 min 48
		430	500	560	620	680	740	810	870	930	990

Identification Procedure		RNP A RWY20				MAG VAR 2020 0.4E			ref NAV/AID : ANG			
Leg sequence	P/T	ID	Fly Over	Direction MAG °	Direction True °	Distance (NM or min)	Turn	MNM level (FL or AMSL ft)	MAY level/EL or AMSL ft)	MAY (AS (kt)	vertical angle (°) / TCH (m)	Nav. Spec
INA MAPEB	IF	MAPEB						3000		220		RNAV1
	TF	RM504		020.0	020.2	22.2	R	3000				RNAV1
INA RM504	TF	IRM20		110.0	110.2	5.0	R	3000		185		RNAV1
	IF	RM504						3000				RNAV1
INA RM502	TF	IRM20		110.0	110.2	5.0	R	3000		185		RNAV1
	IF	RM502						3000		220		RNAV1
APCH	TF	IRM20		290.0	290.4	5.0	L	3000		185		RNAV1
	TF	IRM20						3000				RNP APCH
	TF	FRM20		200.0	200.4	5.0		3000				RNP APCH
	TF	RM20	Yes	200.0	200.4	7.45					3.5° / 15	RNP APCH
HLDG	CA	MAPEB	Yes	200.0	200.4			2000				RNP APCH
	DF	MAPEB	Yes				R	3000		220		RNP APCH