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AIP SUP 002/2020

Effective Date: 27-Feb-2020

End Date: UFN

Publication Date: 16-Jan-2020

LDSP - Airport SPLIT/Kastela - Temporary suspension of RNAV VISUAL RWY23 and publication of trial PBN instrument flight procedures

With this AIP SUP flight procedure RNAV VISUAL RWY23 (LDSP AD 2.24.12 IAC RNAV VISUAL RWY23, WEF 23 MAY 2019) is temporarily suspended. While this AIP SUP is in force RNAV VISUAL RWY23 is temporarily replaced with RNAV VISUAL Z RWY23 which is attached to this AIP SUP.

With this AIP SUP a trial RNAV VISUAL Y RWY23 (LDSP AD 2.24.12 IAC RNAV VISUAL Y RWY23) and ILS X or LOC X RWY05 (LDSP AD 2.24.12 IAC ILS X or LOC X RWY05) instrument flight procedures are available for testing purposes only at Airport SPLIT / Kastela.

Trial RNAV VISUAL Y RWY23 flight procedure is based on combination of instrument approach segments with LNAV minimum and with visual approach segment.

Instrument part of the RNAV VISUAL Y RWY23 flight procedure is based on GNSS and coded up to MAPt fix, while the instrument missed approach segment is conventional only with the use of NDB after MAPt fix.

Visual segment of the RNAV VISUAL Y RWY23 flight procedure will be used according to visual reference only specified on the chart and according to the special notes that are integral part of the chart. Obstacle clearance during the visual part of the approach is responsibility of pilot flying.

Visual approach segment waypoints, related distances, speed limit, bearings and proposed possible coding are for improved situational awareness only.

Trial ILS X or LOC X RWY05 (RNAV TRANSITION TO ILS OR LOC) instrumental flight procedure is based on GNSS initial approach segments up to IF (intermediate fix). After IF conventional approach segments (intermediate and final approach) are applied and are based on ILS system, while instrument missed approach segment is conventional based on DME and NDB.

The instrument flight procedures RNAV VISUAL Y RWY23 and ILS X or LOC X RWY05 are available and shall be used for flight validation purposes only, by approved operators only and according to SPLIT ATC clearance only.

The instrument parts of flight procedures are based on existing ICAO criteria prescribed by ICAO Doc 8168 OPS/611 Vol II (ICAO PANS OPS Vol II).

Integral parts of this AIP SUP are also:

- LDSP RNAV VISUAL Z RWY23 – ICAO Chart, RNAV coding tables, waypoint list,
- LDSP RNAV VISUAL Y RWY23 – ICAO Chart, RNAV coding tables, waypoint list,
- LDSP ILS X or LOC X RWY05 (RNAV TRANSITION TO ILS OR LOC) - ICAO Chart, RNAV coding tables, ADR table, waypoint list.

Record entry of AIP SUP 002/2020 in GEN 0.3.

Ref AIP: LDSP AD 2

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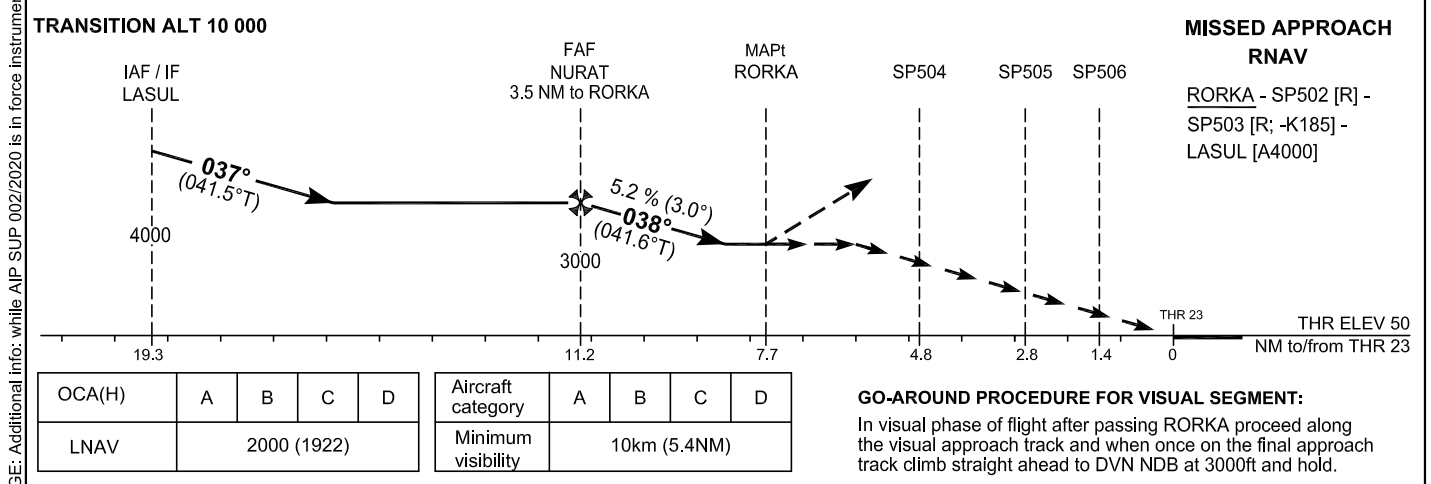
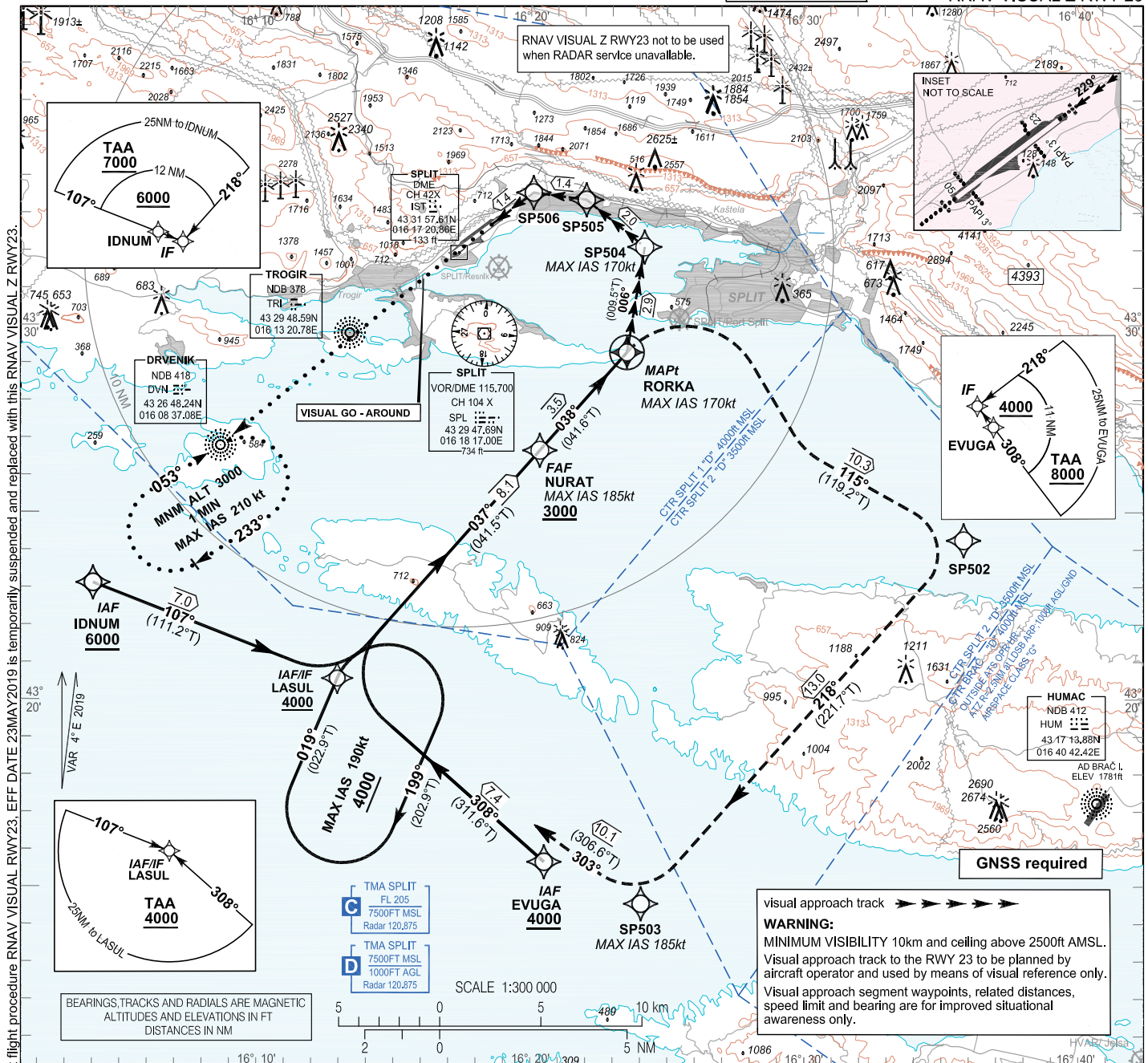
INSTRUMENT APPROACH
CHART - ICAO

AD ELEV 78
HEIGHTS RELATED
TO AD ELEV 78

SPLIT ATIS 125.300
SPLIT RADAR 120.875
SPLIT TOWER 124.675

SPLIT / Kaštela
CROATIA

RNAV VISUAL Z RWY 23



NOTES: For daylight operations only
See special notes for Pilot Flying on the third page.

GO-AROUND PROCEDURE FOR VISUAL SEGMENT:
In visual phase of flight after passing RORKA proceed along the visual approach track and when once on the final approach track climb straight ahead to DVN NDB at 3000ft and hold.

SPLIT / Kaštela

CROATIA

RNAV VISUAL Z RWY 23

LDSP RNAV VISUAL Z RWY23

Proposed tabular description for navigation database coding - INSTRUMENT APPROACH TRANSITION

Serial Number	Fix	Path descriptor	Waypoint name	Flyover	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Remarks	NAV SPEC
010	IAF	IF	IDNUM	-	-	4.00°E	-	-	+6000	-	-	-	RNP APCH
020	IF	TF	LASUL	-	107° (111.2°T)	4.00°E	7.0	-	+4000	-	-	-	RNP APCH
010	IAF	IF	EVUGA	-	-	4.00°E	-	-	+4000	-	-	-	RNP APCH
020	IF	TF	LASUL	-	308° (311.6°T)	4.00°E	7.4	-	+4000	-	-	-	RNP APCH
010	IAF/IF	IF	LASUL	-	-	4.00°E	-	-	+4000	-	-	-	RNP APCH

Proposed tabular description for navigation database coding - INSTRUMENT FINAL APPROACH TRANSITION

Serial Number	Fix	Path descriptor	Waypoint name	Flyover	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Remarks	NAV SPEC
010	IF	IF	LASUL	-	-	4.00°E	-	-	+4000	-	-	-	RNP APCH
020	FAF	TF	NURAT	-	037° (041.5°T)	4.00°E	8.1	-	+3000	-185	-	-	RNP APCH
030	MAPt	TF	RORKA	Y	038° (041.6°T)	4.00°E	3.5	-	-	-170	3.0 / -	-	RNP APCH
040		TF	SP502	-	115° (119.2°T)	4.00°E	10.3	-	-	-	-	-	RNP APCH
050		TF	SP503	-	218° (221.7°T)	4.00°E	13.0	R	-	-185	-	-	RNP APCH
060	MAHF	TF	LASUL	-	303° (306.6°T)	4.00°E	10.1	-	4000	-	-	-	RNP APCH
070	MAHF	HM	LASUL	-	019° (022.9°T)	4.00°E	1 MIN	R	4000	-190	-	Holding above 4000 on ATC clearance only	RNAV 1

VISUAL APPROACH SEGMENT (AFTER RORKA) - POSSIBLE CODING

Serial Number	Fix	Path descriptor	Waypoint name	Flyover	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Remarks	NAV SPEC
-	-	TF	SP504	-	006° (009.5°T)	4.00°E	2.9	-	-	-170	-	-	-
-	-	TF	SP505	-	-	4.00°E	2.0	-	-	-170	-	-	-
-	-	TF	SP506	-	-	4.00°E	1.4	-	-	-170	-	-	-

THR Coordinates

RWY23 433242,33N 0161832,44E

RNAV HOLDING tabular description

Waypoint name	Path Terminator	Inbound course	Leg time/ distance	Turn direction	Minimum altitude	Maximum altitude	Speed limit	Magnetic variation	Remarks	NAV SPEC
		°M (°T)	NM		FT	FT	MAX IAS			
LASUL	HM	019° (022.9°T)	1MIN / -	R	4000	-	190	4°E	-	RNAV 1

Waypoint coordinates

Waypoint name	wgs-84 latitude	wgs-84 longitude
IDNUM	432307.4N	0160358.2E
EVUGA	431541.3N	0162030.1E
LASUL	432035.0N	0161255.7E
NURAT	432640.8N	0162019.6E
RORKA	432918.0N	0162331.0E
SP502	432416.0N	0163551.5E
SP503	431434.2N	0162402.5E

Waypoint coordinates - visual segment

Waypoint name	wgs-84 latitude	wgs-84 longitude
SP504	433207.0N	0162409.9E
SP505	433322.5N	0162201.9E
SP506	433334.0N	0162005.3E

SPECIAL NOTES before practice and operating LDSP RNAV VISUAL Z RWY23 procedure

Requirements for Pilot Flying:

- Obstacle clearance during the visual part of the approach is responsibility of pilot flying.
- After receiving clearance to execute RNAV Visual Z RWY23, pilot flying is expected to:
 - a) Not later than passing RORKA must be in visual reference to terrain with minimum visibility of 10 km (5.4NM) and ceiling above 2500ft AMSL and to continue with visual part of procedure, or
 - b) From RORKA follow the prescribed instrument missed approach procedure for LDSP RNAV VISUAL Z RWY23.
- Visual approach segment waypoints, related distances, speed limit and bearing are for improved situational awareness only.

ATC / pilot communication procedures and requirement:

- When RWY23 is in use, during daytime, RNAV Visual Z RWY23 will be considered as primary approach (announced by ATIS or ATC).
- If ATIS information announces RNAV Visual Z APCH RWY23 to be expected, Operators unable to accept this approach, shall advise Split APP on first contact.

CHANGE: Additional info: while AIP SUP 002/2020 is in force instrument flight procedure RNAV VISUAL RWY23, EFF DATE 23MAY2019 is temporarily suspended and replaced with this RNAV VISUAL Z RWY23.

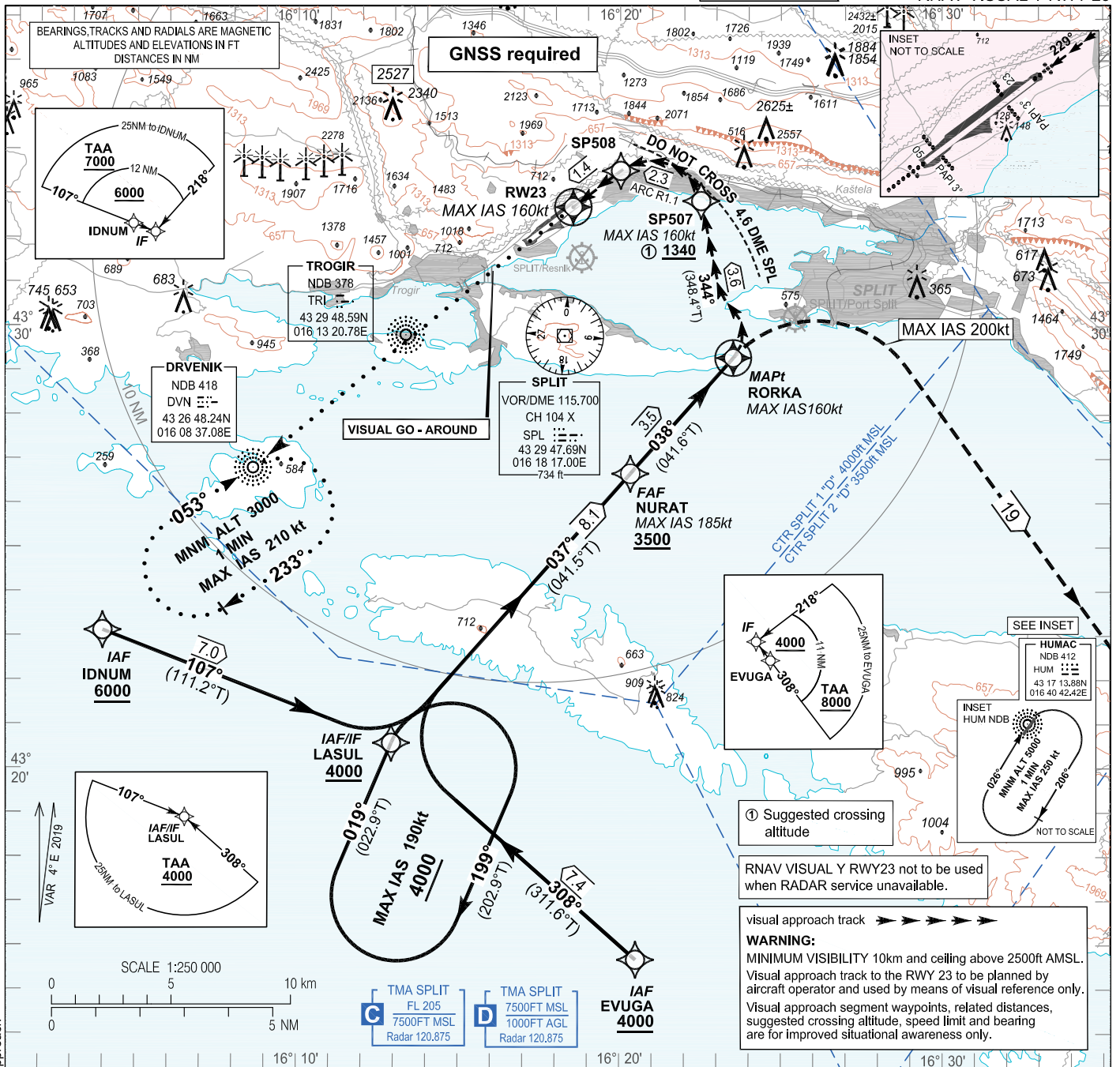
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INSTRUMENT APPROACH
CHART - ICAO

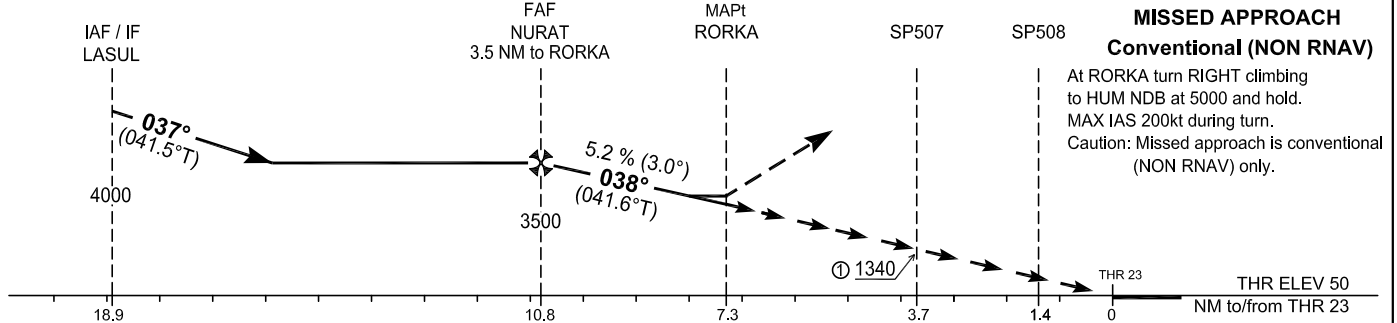
AD ELEV 78
HEIGHTS RELATED
TO AD ELEV 78

SPLIT ATIS 125.300
SPLIT RADAR 120.875
SPLIT TOWER 124.675

SPLIT / Kaštela
CROATIA
RNAV VISUAL Y RWY 23



TRANSITION ALT 10 000



MISSED APPROACH
Conventional (NON RNAV)

At RORKA turn RIGHT climbing to HUM NDB at 5000 and hold.
MAX IAS 200kt during turn.
Caution: Missed approach is conventional (NON RNAV) only.

OCA(H)	A	B	C	D	Aircraft category	A	B	C	D
LNAV	2500 (2422)				Minimum visibility	10km (5.4NM)			

GO-AROUND PROCEDURE FOR VISUAL SEGMENT:
In visual phase of flight after passing RORKA proceed along the visual approach track and when once on the final approach track climb straight ahead to DVN NDB at 3000ft and hold.

NOTES: For daylight operations only
See special notes for Pilot Flying on the third page.

CHANGE: FAF MINM ALT, OCA(H), Visual approach segment, missed approach

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for flight validation purposes only.*

RNAV VISUAL Y RWY 23

LDSP RNAV VISUAL Y RWY23

Proposed tabular description for navigation database coding - INSTRUMENT APPROACH TRANSITION

Serial Number	Fix	Path descriptor	Waypoint name	Flyover	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Remarks	NAV SPEC
010	IAF	IF	IDNUM	-	-	4.00°E	-	-	+6000	-	-	-	RNP APCH
020	IF	TF	LASUL	-	107° (111.2°T)	4.00°E	7.0	-	+4000	-	-	-	
010	IAF	IF	EVUGA	-	-	4.00°E	-	-	+4000	-	-	-	RNP APCH
020	IF	TF	LASUL	-	308° (311.6°T)	4.00°E	7.4	-	+4000	-	-	-	
010	IAF/IF	IF	LASUL	-	-	4.00°E	-	-	+4000	-	-	-	RNP APCH

Proposed tabular description for navigation database coding - INSTRUMENT FINAL APPROACH TRANSITION

Serial Number	Fix	Path descriptor	Waypoint name	Flyover	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Remarks	NAV SPEC
010	IF	IF	LASUL	-	-	4.00°E	-	-	+4000	-	-	Missed approach is non-RNAV (see profile view of the charts)	RNP APCH
020	FAF	TF	NURAT	-	037° (041.5°T)	4.00°E	8.1	-	+3500	-185	-		
030	MAPt	TF	RORKA	Y	038° (041.6°T)	4.00°E	3.5	-	-	-160	3.0 / -		

VISUAL APPROACH SEGMENT AND VISUAL GO-AROUND PROCEDURE (AFTER RORKA) - POSSIBLE CODING

Serial Number	Fix	Path descriptor	Waypoint name	Flyover	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Remarks	NAV SPEC
-	-	TF	SP507	-	344° (348.4°T)	4.00°E	3.6	-	+1340	-160	-	Do not cross 4.6 DME SPL	-
-	-	RF	SP508	-	-	4.00°E	2.3	Left	-	-	-		
-	-	CF	RW23	Y	229° (232.6°T)	4.00°E	1.4	-	-	-160	-	-	-
-	-	DF	DVN	-	-	4.00°E	-	-	3000	-	-	See Note	-

Note: at DVN enter DVN NDB holding at 3000 and hold (see the chart).**ARC Centre Waypoint**

Identifier	Waypoint coordinates	ARC Radius NM	Remarks
SP509	433237.0N 0162058.4E	1.1	-

RNAV HOLDING tabular description

Waypoint name	Path Terminator	Inbound course	Leg time/distance	Turn direction	Minimum altitude	Maximum altitude	Speed limit	Magnetic variation	Remarks	NAV SPEC
		°M (°T)	NM		FT	FT	MAX IAS			
LASUL	HM	019° (022.9°T)	1MIN / -	R	4000	-	190	4°E	-	RNAV 1

Waypoint coordinates

Waypoint name	wgs-84 latitude	wgs-84 longitude
IDNUM	432307.4N	0160358.2E
EVUGA	431541.3N	0162030.1E
LASUL	432035.0N	0161255.7E
NURAT	432640.8N	0162019.6E
RORKA	432918.0N	0162331.0E

Waypoint coordinates - visual segment

Waypoint name	wgs-84 latitude	wgs-84 longitude
SP507	433250.9N	0162230.9E
SP508	433331.6N	0162001.0E
RW23	433242.33N	0161832.44E
DVN	432648.24N	0160837.08E

CHANGE: FAF MNM ALT, OCA(H), Visual approach segment, missed approach

*This IF procedure shall be used
for flight validation purposes only.*

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CROATIA
RNAV VISUAL Y RWY 23

SPECIAL NOTES before practice and operating LDSP RNAV VISUAL Y RWY23 procedure

Requirements for Pilot Flying:

- Obstacle clearance during the visual part of the approach is responsibility of pilot flying.
- After receiving clearance to execute RNAV Visual Y RWY23, pilot flying is expected to:
 - a) Not later than passing RORKA must be in visual reference to terrain with minimum visibility of 10 km (5.4NM) and ceiling above 2500ft AMSL and to continue with visual part of procedure, or
 - b) From RORKA follow the prescribed instrument missed approach procedure for LDSP RNAV VISUAL Y RWY23.
- Visual approach segment waypoints, related distances, suggested crossing altitude, speed limit and bearing are for improved situational awareness only.

ATC / pilot communication procedures and requirement:

- When RWY23 is in use, during daytime, RNAV Visual Y RWY23 will be considered as primary approach (announced by ATIS or ATC).
- If ATIS information announces RNAV Visual Y APCH RWY23 to be expected, Operators unable to accept this approach, shall advise Split APP on first contact.

CHANGE: FAF MNM ALT, OCA(H), Visual approach segment, missed approach

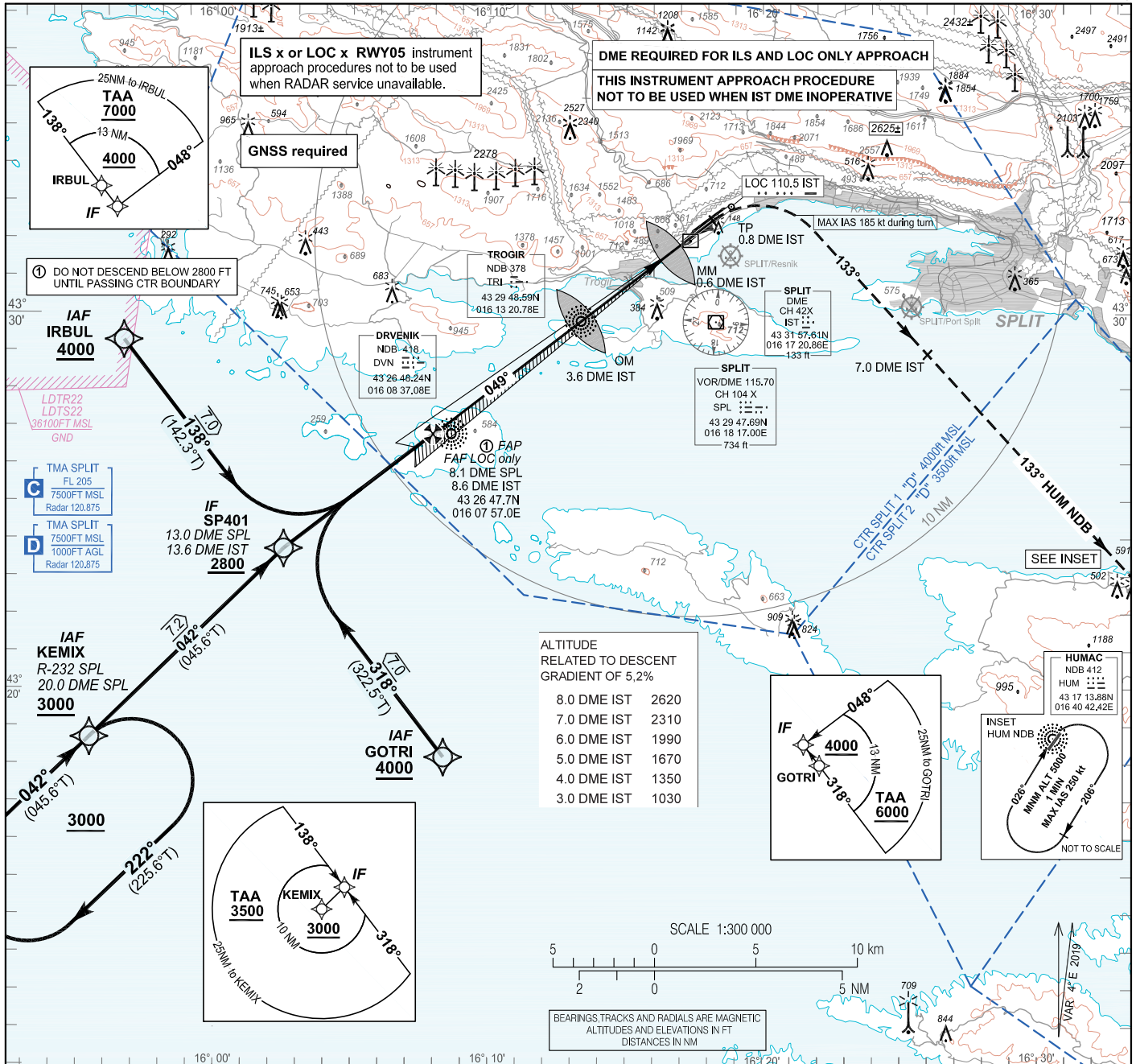
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INSTRUMENT APPROACH
CHART - ICAO

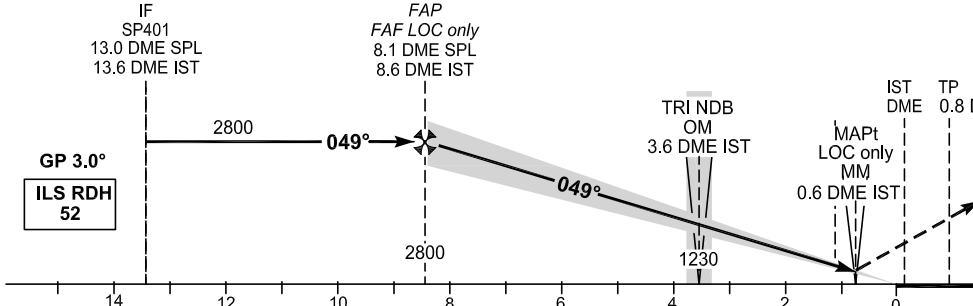
AD ELEV 78
HEIGHTS RELATED
TO THR 05 ELEV 70

SPLIT ATIS 125.300
SPLIT RADAR 120.875
SPLIT TOWER 124.675

**SPLIT/ Kaštela
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ILS x or LOC x RWY 05
(RNAV 1 to ILS or LOC transition)



TRANSITION ALT 10 000



MISSED APPROACH:
Climb straight ahead. At 0.8 DME IST (after passing THR 05) turn RIGHT climbing on track 133°. From 7.0 DME IST intercept and follow QDM 133° HUM climbing to HUM NDB at 5000 and HOLD. MAX IAS 185 kt during turn.

OCA(H)		A	B	C	D
Straight-in Approach	ILS CAT I press. altim.	420 (350)	430 (360)	440 (370)	450 (380)
	LOC only	870 (800)			

GS(kt)	70	100	120	140	160	180
Rate of descent (ft/min)	369	527	632	737	843	948

CHANGE: New chart

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AERONAUTICAL DATABASE REQUIREMENTS

ILS x or LOC x RWY 05

(RNAV 1 to ILS or LOC transition)

LDSP ILS x or LOC x RWY05 (RNAV 1 to ILS OR LOC transition)

Proposed tabular description for navigation database coding - APPROACH TRANSITION

Serial Number	Fix	Path descriptor	Waypoint name	Flyover	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Remarks	NAV SPEC
010	IAF	IF	GOTRI	-	-	4.00°E	-	-	+4000	-	-	-	RNAV 1
020	IF	TF	SP401	-	318° (322.5° T)	4.00°E	7.0	-	+2800	-	-	-	
010	IAF	IF	KEMIX	-	-	4.00°E	-	-	+3000	-	-	-	RNAV 1
020	IF	TF	SP401	-	042° (045.6° T)	4.00°E	7.2	-	+2800	-	-	-	
010	IAF	IF	IRBUL	-	-	4.00°E	-	-	+4000	-	-	-	RNAV 1
020	IF	TF	SP401	-	138° (142.3° T)	4.00°E	7.0	-	+2800	-	-	-	

AERONAUTICAL DATABASE REQUIREMENTS

Conventional procedure essential fixes/points

ILS x or LOC x RWY05

LOC only - final approach descent angle: 3.00°

Fix identification	Coordinates	True bearing or ARC distance providing track	True bearing or distance providing intersection
IF (SP401)	43 23 44.7N 016 02 30.4E	-	-
FAF LOC only	43 26 47.7N 016 07 57.0E	052.57° (IST LOC)	8.10 DME SPL 8.57 DME IST
SDF LOC only (OM05)	See LDSP AD 2.19	052.57° (IST LOC)	3.62 DME IST
MAPt	See LDSP AD 2.19	052.57° (IST LOC)	0.62 DME IST
TP	43 32 29.8N 016 18 09.9E	052.57° (IST LOC)	0.80 DME IST

RNAV HOLDING tabular description

Waypoint name	Path Terminator	Inbound course °M (°T)	Leg time/distance NM	Turn direction	Minimum altitude FT	Maximum altitude FT	Speed limit MAX IAS	Magnetic variation	Remarks	NAV SPEC
KEMIX	HM	042° (045.6°T)	1MIN / -	R	3000	-	-	4°E	-	RNAV 1

Waypoint coordinates

Waypoint name	WGS-84 Latitude	WGS-84 Longitude
GOTRI	431811.7N	0160821.4E
IRBUL	432917.5N	0155638.4E
KEMIX	431842.4N	0155526.9E
SP401	432344.7N	0160230.4E

CHANGE: New chart