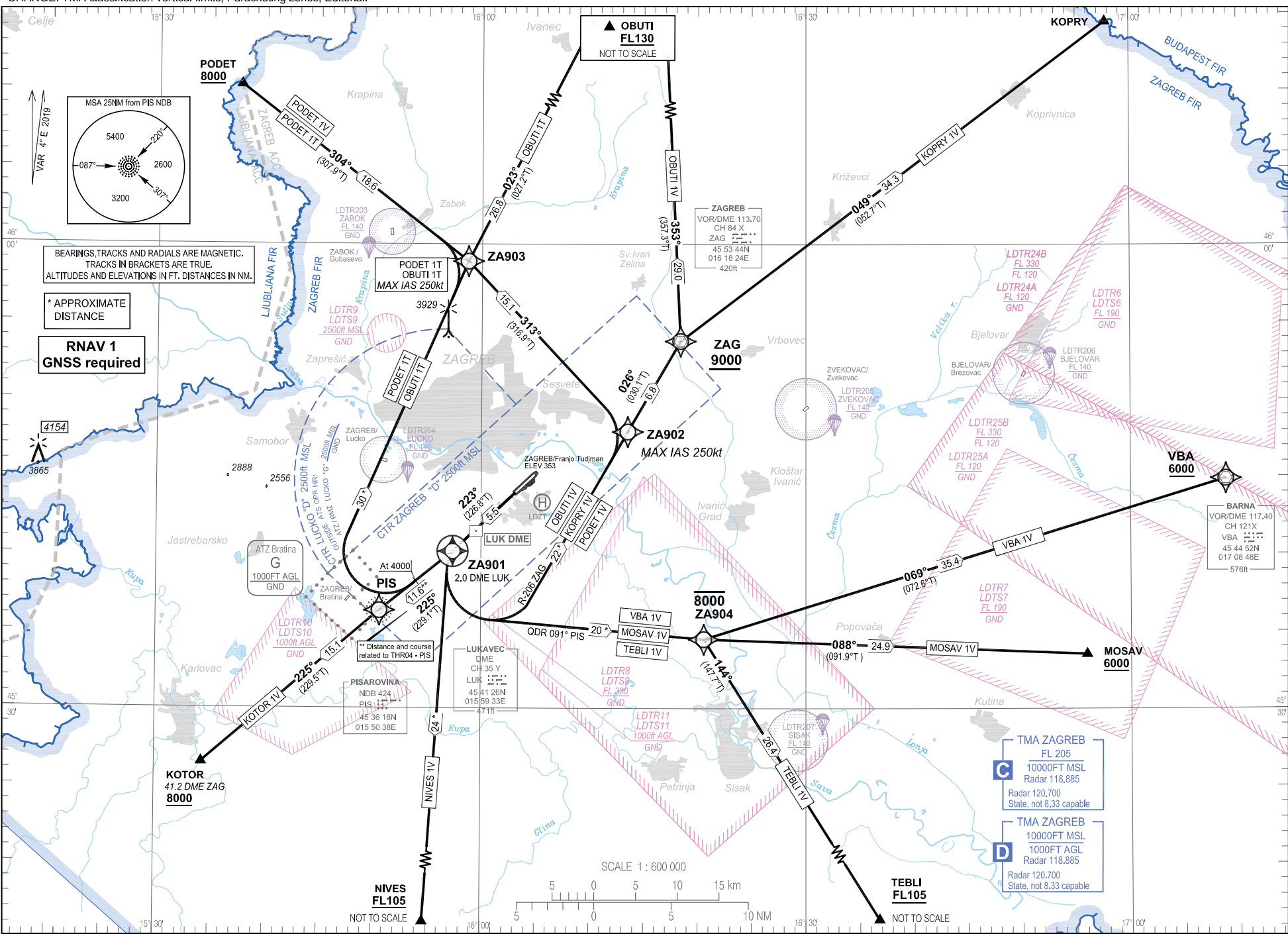


## ZAGREB / Franjo Tuđman (LDZA)



ZAGREB / Franjo Tudjman (LDZA)

PODET 1V    OBUTI 1V    KOPRY 1V    VBA 1V  
MOSAV 1V    TEBLI 1V    PODET 1T  
OBUTI 1T    NIVES 1V    KOTOR 1V

GENERAL INFORMATION AND REQUIREMENTS FOR ALL SIDS

- Calculation of the SIDs is based on an all-engines operative minimum net climb gradient of 3.3 per cent (201 ft/NM). Where a greater climb gradient for a specific SID (or part of SID) is necessary this is indicated in the tabular description of the route.

- After take-off climb initially 6000 ft and contact Zagreb Radar on 118.885 MHz (Zagreb Radar 120.700 MHz State, not 8.33 capable).

**WARNING**

**Back-up conventional (NON-RNAV) procedure, in case of loss of RNAV 1 capability or RNAV system failure, below minimum radar vectoring altitude for RNAV SIDs PODET 1V, OBUTI 1V and KOPRY 1V only:**

Climb straight ahead to 2.0 DME LUK (ZA901). At 2.0 DME LUK (ZA901) turn LEFT climbing to intercept and follow R-206 ZAG. On passing 3000 ft AMSL proceed via RNAV SID flight procedure filed in FPL or according to ATC instruction.

| LDZA RNAV STANDARD INSTRUMENT DEPARTURE RWY 22              |          |                 |               |         |                    |                    |               |                |               |            |                                                                  |          |
|-------------------------------------------------------------|----------|-----------------|---------------|---------|--------------------|--------------------|---------------|----------------|---------------|------------|------------------------------------------------------------------|----------|
| Proposed tabular description for navigation database coding |          |                 |               |         |                    |                    |               |                |               |            |                                                                  |          |
| Serial number                                               | Route    | Path descriptor | Waypoint name | Flyover | Course °M (°T)     | Magnetic variation | Distance (NM) | Turn direction | Altitude (ft) | Speed (kt) | Remarks                                                          | NAV SPEC |
| 010                                                         | PODET 1V | CF              | ZA901         | Y       | 223°<br>(226.8°T)  | 4°E                | 5.5           | -              | -             | -          | MNM PDG 4.0% (243 ft/NM) to 2300 ft AMSL due to G class airspace | RNAV 1   |
| 020                                                         |          | DF              | ZA902         | -       | -                  | 4°E                | -             | L              | -             | -250       |                                                                  |          |
| 030                                                         |          | TF              | ZA903         | -       | 313°<br>(316.9° T) | 4°E                | 15.1          | -              | -             | -          |                                                                  |          |
| 040                                                         |          | TF              | PODET         | -       | 304°<br>(307.9°T)  | 4°E                | 18.6          | -              | +8000         | -          |                                                                  |          |
| 010                                                         | OBUTI 1V | CF              | ZA901         | Y       | 223°<br>(226.8°T)  | 4°E                | 5.5           | -              | -             | -          | MNM PDG 4.0% (243 ft/NM) to 2300 ft AMSL due to G class airspace | RNAV 1   |
| 020                                                         |          | DF              | ZA902         | -       | -                  | 4°E                | -             | L              | -             | -250       |                                                                  |          |
| 030                                                         |          | TF              | ZAG           | -       | 026°<br>(030.1° T) | 4°E                | 6.8           | -              | +9000         | -          |                                                                  |          |
| 040                                                         |          | TF              | OBUTI         | -       | 353°<br>(357.3°T)  | 4°E                | 29.0          | -              | +FL130        | -          |                                                                  |          |
| 010                                                         | KOPRY 1V | CF              | ZA901         | Y       | 223°<br>(226.8°T)  | 4°E                | 5.5           | -              | -             | -          | MNM PDG 4.0% (243 ft/NM) to 2300 ft AMSL due to G class airspace | RNAV 1   |
| 020                                                         |          | DF              | ZA902         | -       | -                  | 4°E                | -             | L              | -             | -250       |                                                                  |          |
| 030                                                         |          | TF              | ZAG           | -       | 026°<br>(030.1° T) | 4°E                | 6.8           | -              | +9000         | -          |                                                                  |          |
| 040                                                         |          | TF              | KOPRY         | -       | 049°<br>(052.7°T)  | 4°E                | 34.3          | -              | -             | -          |                                                                  |          |

CHANGE: TMA classification vertical limits; Parachuting zones; Editorial.

**WARNING**  
**Back-up conventional (NON-RNAV) procedure, in case of loss of RNAV 1 capability or RNAV system failure, below minimum radar vectoring altitude for RNAV SIDs VBA 1V, MOSAV 1V and TEBLI 1V only:**  
Climb straight ahead to 2.0 DME LUK (ZA901). At 2.0 DME LUK (ZA901) turn LEFT climbing to intercept and follow bearing QDR 091° PIS NDB. On passing 3000 ft AMSL proceed via RNAV SID flight procedure filed in FPL or according to ATC instruction.

LDZA RNAV STANDARD INSTRUMENT DEPARTURE RWY 22

Proposed tabular description for navigation database coding

| Serial number | Route    | Path descriptor | Waypoint name | Flyover | Course °M (°T)    | Magnetic variation | Distance (NM) | Turn direction | Altitude (ft) | Speed (kt) | Remarks                                                          | NAV SPEC |
|---------------|----------|-----------------|---------------|---------|-------------------|--------------------|---------------|----------------|---------------|------------|------------------------------------------------------------------|----------|
| 010           | VBA 1V   | CF              | ZA901         | Y       | 223°<br>(226.8°T) | 4°E                | 5.5           | -              | -             | -          | MNM PDG 4.0% (243 ft/NM) to 2300 ft AMSL due to G class airspace | RNAV 1   |
| 020           |          | DF              | ZA904         | -       | -                 | 4°E                | -             | L              | -8000         | -          |                                                                  |          |
| 030           |          | TF              | VBA           | -       | 069°<br>(072.6°T) | 4°E                | 35.4          | -              | +6000         | -          |                                                                  |          |
| 010           | MOSAV 1V | CF              | ZA901         | Y       | 223°<br>(226.8°T) | 4°E                | 5.5           | -              | -             | -          | MNM PDG 4.0% (243 ft/NM) to 2300 ft AMSL due to G class airspace | RNAV 1   |
| 020           |          | DF              | ZA904         | -       | -                 | 4°E                | -             | L              | -8000         | -          |                                                                  |          |
| 030           |          | TF              | MOSAV         | -       | 088°<br>(091.9°T) | 4°E                | 24.9          | -              | +6000         | -          |                                                                  |          |
| 010           | TEBLI 1V | CF              | ZA901         | Y       | 223°<br>(226.8°T) | 4°E                | 5.5           | -              | -             | -          | MNM PDG 4.0% (243 ft/NM) to 2300 ft AMSL due to G class airspace | RNAV 1   |
| 020           |          | DF              | ZA904         | -       | -                 | 4°E                | -             | L              | -8000         | -          |                                                                  |          |
| 030           |          | TF              | TEBLI         | -       | 144°<br>(147.7°T) | 4°E                | 26.4          | -              | +FL105        | -          |                                                                  |          |

CHANGE: TMA classification vertical limits; Parachuting zones; Editorial.

ZAGREB / Franjo Tudjman (LDZA)

PODET 1V   OBUTI 1V   KOPRY 1V   VBA 1V  
MOSAV 1V   TEBLI 1V   PODET 1T  
OBUTI 1T   NIVES 1V   KOTOR 1V

RNAV RWY 22

| LDZA RNAV STANDARD INSTRUMENT DEPARTURE RWY 22              |          |                 |               |         |                   |                    |               |                |               |            |                                          |          |
|-------------------------------------------------------------|----------|-----------------|---------------|---------|-------------------|--------------------|---------------|----------------|---------------|------------|------------------------------------------|----------|
| Proposed tabular description for navigation database coding |          |                 |               |         |                   |                    |               |                |               |            |                                          |          |
| Serial number                                               | Route    | Path descriptor | Waypoint name | Flyover | Course °M (°T)    | Magnetic variation | Distance (NM) | Turn direction | Altitude (ft) | Speed (kt) | Remarks                                  | NAV SPEC |
| 010                                                         | PODET 1T | CA              | -             | -       | 223°<br>(226.8°T) | 4°E                | -             | -              | @4000         | -          | MNM PDG 6.7% (407 ft/NM) to 5000 ft AMSL | RNAV 1   |
| 020                                                         |          | DF              | ZA903         | -       | -                 | 4°E                | -             | R              | -             | -250       |                                          |          |
| 030                                                         |          | TF              | PODET         | -       | 304°<br>(307.9°T) | 4°E                | 18.6          | -              | +8000         | -          |                                          |          |
| 010                                                         | OBUTI 1T | CA              | -             | -       | 223°<br>(226.8°T) | 4°E                | -             | -              | @4000         | -          | MNM PDG 6.7% (407 ft/NM) to 5000 ft AMSL | RNAV 1   |
| 020                                                         |          | DF              | ZA903         | -       | -                 | 4°E                | -             | R              | -             | -250       |                                          |          |
| 030                                                         |          | TF              | OBUTI         | -       | 023°<br>(027.2°T) | 4°E                | 26.8          | -              | +FL130        | -          |                                          |          |
| 010                                                         | NIVES 1V | CF              | ZA901         | Y       | 223°<br>(226.8°T) | 4°E                | 5.5           | -              | +2500         | -          | MNM PDG 6.4% (389 ft/NM) to 2500 ft AMSL | RNAV 1   |
| 020                                                         |          | DF              | NIVES         | -       | -                 | 4°E                | -             | L              | +FL105        | -          |                                          |          |
| 010                                                         | KOTOR 1V | CF              | PIS           | -       | 225°<br>(229.1°T) | 4°E                | 11.6          | -              | -             | -          | -                                        | RNAV 1   |
| 030                                                         |          | TF              | KOTOR         | -       | 225°<br>(229.5°T) | 4°E                | 15.1          | -              | +8000         | -          |                                          |          |

| Waypoint coordinates |                 |                  |
|----------------------|-----------------|------------------|
| Waypoint name        | WGS-84 latitude | WGS-84 longitude |
| KOPRY                | 461425N         | 0165746E         |
| KOTOR                | 452628N         | 0153420E         |
| MOSAV                | 453331N         | 0165557E         |
| NIVES                | 451326N         | 0155427E         |
| OBUTI                | 462242N         | 0161627E         |
| PODET                | 461017N         | 0153736E         |
| TEBLI                | 451205N         | 0164033E         |
| PIS                  | 453618.10N      | 0155038.39E      |
| VBA                  | 454452.08N      | 0170848.29E      |
| ZAG                  | 455344.01N      | 0161824.11E      |
| ZA901                | 454007.9N       | 0155722.9E       |
| ZA902                | 454752.4N       | 0161331.9E       |
| ZA903                | 455852.9N       | 0155844.4E       |
| ZA904                | 453427.5N       | 0162035.1E       |

CHANGE: TMA classification vertical limits; Parachuting zones; Editorial.