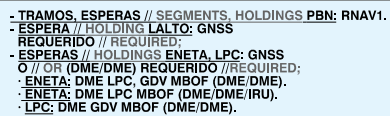


**GRAN CANARIA**  
ILS Z  
**RWY 21R**



| GS              |  | kt     | 80   | 100  | 120  | 140  | 160  | 180  |
|-----------------|--|--------|------|------|------|------|------|------|
| FAF-THR: 5.6 NM |  | min/s  | 4:12 | 3:22 | 2:48 | 2:24 | 2:06 | 1:52 |
| FAF-MAPT:       |  | min/s  |      |      |      |      |      |      |
| ROD: 5.2 %      |  | ft/min | 425  | 531  | 637  | 743  | 849  | 955  |

| ALT/HGT DME (ILS) FNA |    |    |    |   |   |   |   |                |                |                |              |              |
|-----------------------|----|----|----|---|---|---|---|----------------|----------------|----------------|--------------|--------------|
| 13                    | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5              | 4              | 3              | 2            | 1            |
|                       |    |    |    |   |   |   |   | 1710<br>(1670) | 1380<br>(1350) | 1050<br>(1020) | 730<br>(700) | 410<br>(380) |

AERONAUTICAL DATABASE REQUIREMENTS

INSTRUMENT APPROACH PROCEDURES  
ILS Z RWY 21R

WAYPOINTS COORDINATES

| WPT         | COORD                |
|-------------|----------------------|
| ENETA (IAF) | 275529.6N 0145938.4W |
| GOPIM       | 275333.0N 0150349.2W |
| NINGU       | 275912.9N 0150310.6W |
| LALTO (IAF) | 274153.2N 0150014.3W |
| LECOP       | 280702.3N 0150453.7W |
| LIFED       | 275814.5N 0150515.9W |
| LP515       | 274657.6N 0152033.9W |
| LP516       | 274506.0N 0151713.6W |
| LP517       | 274706.0N 0151351.0W |
| LPC (IAF)   | 274942.7N 0152556.1W |
| MADAS (IAF) | 281315.5N 0152244.1W |
| SUFEM       | 280255.9N 0150642.7W |
| TIPUX (IF)  | 280657.6N 0151818.2W |
| TOCUN       | 280853.9N 0151013.0W |

| POINT                                            | LAT       | LONG       | TRUE BEARING      | DME DISTANCE (NM) |
|--------------------------------------------------|-----------|------------|-------------------|-------------------|
| IF                                               | 280657.6N | 0151818.2W | 021.44° (LOC RLP) | 11.0 DME ILS      |
| FAP                                              | 280155.7N | 0152032.0W | 021.44° (LOC RLP) | 5.61 DME ILS      |
| Precision final approach - Slope (Descent angle) |           |            |                   | 5.24 % (3.00°)    |

CRITICAL DME

| FACILITY (ID)          | FREQ/CH              | COORD                      |
|------------------------|----------------------|----------------------------|
| GRAN CANARIA (GDV)     | 112.90 MHz<br>CH 76X | 280437.6297N 0152542.8144W |
| GRAN CANARIA SUR (LPC) | 115.00 MHz<br>CH 97X | 274943.2149N 0152555.9428W |

NOTES APPLICABLE TO ALL APPROACHES:

- Initial segments, missed apch and holdings: RNAV1.
- Speed control:
  - a. MAX IAS 250 kt to FL100 or below, except military flights on operational or air defence missions or when the operational characteristics do not allow for it.
  - b. If any different instructions are not received by ATC cross:
    - MADAS, ENETA and LALTO at 220 kt,
    - TIPUX at 210 kt,
    - 9.0 DME ILS at IAS 190 kt, and
    - 4.0 DME ILS at IAS 160 kt.
  - c. In the event of being unable to comply with it (b), notify it to ATC at the first communication.

PROCEDURE TABULAR DESCRIPTION

| Serial number                                                                               | Path Terminator | Waypoint identifier | Fly-over | Course/Track °M (°T) | Magnetic variation | Distance (NM) | Turn direction | Altitude (ft) | Speed (kt) | VPA/TCH (°/ft) | Navigation specification |
|---------------------------------------------------------------------------------------------|-----------------|---------------------|----------|----------------------|--------------------|---------------|----------------|---------------|------------|----------------|--------------------------|
| <div>ENETA (IAF)</div> <div>required.</div> <div>Subject to GCD51 and GCD54 activity.</div> |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                         | IF              | ENETA               | -        | -                    | +3.5               | -             | -              | +5000 (1)     | -220       | -              | RNAV1                    |
| 002                                                                                         | TF              | NINGU               | -        | 323 (319.9)          | +3.5               | 4.9           | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                         | TF              | SUFEM               | -        | 323 (319.8)          | +3.5               | 4.9           | -              | -             | -          | -              | RNAV1                    |
| 004                                                                                         | TF              | LECOP               | -        | 025 (021.4)          | +3.5               | 4.4           | -              | -             | -          | -              | RNAV1                    |
| 005                                                                                         | TF              | TOCUN               | -        | 295 (291.5)          | +3.5               | 5.1           | -              | -             | -          | -              | RNAV1                    |
| 006                                                                                         | TF              | TIPUX               | -        | 258 (254.9)          | +3.5               | 7.4           | -              | +2500         | -          | -              | RNAV1                    |
| MISSED APCH                                                                                 |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                         | CA              | -                   | -        | 205 (201.4)          | +3.5               | -             | -              | +1100         | -          | -              | RNAV1                    |
| 002                                                                                         | DF              | LP515               | -        | -                    | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                         | TF              | LP516               | -        | 126 (122.1)          | +3.5               | 3.5           | -              | -             | -200       | -              | RNAV1                    |
| 004                                                                                         | CA              | -                   | -        | 060 (056.3)          | +3.5               | -             | -              | +3000         | -210       | -              | RNAV1                    |
| 005                                                                                         | VM              | -                   | -        | 060 (056.3)          | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| MISSED APCH COMMUNICATIONS FAILURE                                                          |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                         | CA              | -                   | -        | 205 (201.4)          | +3.5               | -             | -              | +1100         | -          | -              | RNAV1                    |
| 002                                                                                         | DF              | LP515               | -        | -                    | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                         | TF              | LP516               | -        | 126 (122.1)          | +3.5               | 3.5           | -              | -             | -200       | -              | RNAV1                    |
| 004                                                                                         | TF              | LP517               | -        | 060 (056.3)          | +3.5               | 3.6           | -              | @3000         | -210       | -              | RNAV1                    |
| 005                                                                                         | TF              | ENETA               | -        | 060 (056.3)          | +3.5               | 15.1          | -              | @4000         | -220       | -              | RNAV1                    |
| Minimum altitude 4000 ft under ATC clearance and missed approach.                           |                 |                     |          |                      |                    |               |                |               |            |                |                          |

| Serial number                                                                               | Path Terminator | Waypoint identifier | Fly-over | Course/Track °M (°T) | Magnetic variation | Distance (NM) | Turn direction | Altitude (ft) | Speed (kt) | VPA/TCH (°/ft) | Navigation specification |
|---------------------------------------------------------------------------------------------|-----------------|---------------------|----------|----------------------|--------------------|---------------|----------------|---------------|------------|----------------|--------------------------|
| <div>LALTO (IAF)</div> <div>required.</div> <div>Subject to GCD51 and GCD54 activity.</div> |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                         | IF              | LALTO               | -        | -                    | +3.5               | -             | -              | +5000         | -220       | -              | RNAV1                    |
| 002                                                                                         | TF              | GOPIM               | -        | 348 (344.7)          | +3.5               | 12.1          | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                         | TF              | LIFED               | -        | 348 (344.7)          | +3.5               | 4.9           | -              | -             | -          | -              | RNAV1                    |
| 004                                                                                         | TF              | SUFEM               | -        | 348 (344.7)          | +3.5               | 4.8           | -              | -             | -          | -              | RNAV1                    |
| 005                                                                                         | TF              | LECOP               | -        | 025 (021.4)          | +3.5               | 4.4           | -              | -             | -          | -              | RNAV1                    |
| 006                                                                                         | TF              | TOCUN               | -        | 295 (291.5)          | +3.5               | 5.1           | -              | -             | -          | -              | RNAV1                    |
| 007                                                                                         | TF              | TIPUX               | -        | 258 (254.9)          | +3.5               | 7.4           | -              | +2500         | -          | -              | RNAV1                    |
| MISSED APCH                                                                                 |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                         | CA              | -                   | -        | 205 (201.4)          | +3.5               | -             | -              | +1100         | -          | -              | RNAV1                    |
| 002                                                                                         | DF              | LP515               | -        | -                    | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                         | TF              | LP516               | -        | 126 (122.1)          | +3.5               | 3.5           | -              | -             | -200       | -              | RNAV1                    |
| 004                                                                                         | CA              | -                   | -        | 060 (056.3)          | +3.5               | -             | -              | +3000         | -210       | -              | RNAV1                    |
| 005                                                                                         | VM              | -                   | -        | 060 (056.3)          | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| MISSED APCH COMMUNICATIONS FAILURE                                                          |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                         | CA              | -                   | -        | 205 (201.4)          | +3.5               | -             | -              | +1100         | -          | -              | RNAV1                    |
| 002                                                                                         | DF              | LP515               | -        | -                    | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                         | TF              | LP516               | -        | 126 (122.1)          | +3.5               | 3.5           | -              | -             | -200       | -              | RNAV1                    |
| 004                                                                                         | TF              | LP517               | -        | 060 (056.3)          | +3.5               | 3.6           | -              | @3000         | -210       | -              | RNAV1                    |
| 005                                                                                         | TF              | ENETA               | -        | 060 (056.3)          | +3.5               | 15.1          | -              | @4000         | -220       | -              | RNAV1                    |

| Serial number                                                                             | Path Terminator | Waypoint identifier | Fly-over | Course/Track °M (°T) | Magnetic variation | Distance (NM) | Turn direction | Altitude (ft) | Speed (kt) | VPA/TCH (°/ft) | Navegation specification |
|-------------------------------------------------------------------------------------------|-----------------|---------------------|----------|----------------------|--------------------|---------------|----------------|---------------|------------|----------------|--------------------------|
| <div>LPC (IAF)</div> <div>required.</div> <div>Subject to GCD51 and GCD54 activity.</div> |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                       | IF              | LPC                 | -        | -                    | +3.5               | -             | -              | +FL075        | -210       | -              | RNAV1                    |
| 002                                                                                       | TF              | SUFEM               | -        | 056 (052.2)          | +3.5               | 21.5          | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                       | TF              | LECOP               | -        | 025 (021.4)          | +3.5               | 4.4           | -              | -             | -          | -              | RNAV1                    |
| 004                                                                                       | TF              | TOCUN               | -        | 295 (291.5)          | +3.5               | 5.1           | -              | -             | -          | -              | RNAV1                    |
| 005                                                                                       | TF              | TIPUX               | -        | 258 (254.9)          | +3.5               | 7.4           | -              | +2500         | -          | -              | RNAV1                    |
| MISSED APCH                                                                               |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                       | CA              | -                   | -        | 205 (201.4)          | +3.5               | -             | -              | +1100         | -          | -              | RNAV1                    |
| 002                                                                                       | DF              | LP515               | -        | -                    | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                       | TF              | LP516               | -        | 126 (122.1)          | +3.5               | 3.5           | -              | -             | -200       | -              | RNAV1                    |
| 004                                                                                       | CA              | -                   | -        | 060 (056.3)          | +3.5               | -             | -              | +3000         | -210       | -              | RNAV1                    |
| 005                                                                                       | VM              | -                   | -        | 060 (056.3)          | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| MISSED APCH COMMUNICATIONS FAILURE                                                        |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                       | CA              | -                   | -        | 205 (201.4)          | +3.5               | -             | -              | +1100         | -          | -              | RNAV1                    |
| 002                                                                                       | DF              | LP515               | -        | -                    | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                       | TF              | LP516               | -        | 126 (122.1)          | +3.5               | 3.5           | -              | -             | -200       | -              | RNAV1                    |
| 004                                                                                       | TF              | LP517               | -        | 060 (056.3)          | +3.5               | 3.6           | -              | @3000         | -210       | -              | RNAV1                    |
| 005                                                                                       | TF              | ENETA               | -        | 060 (056.3)          | +3.5               | 15.1          | -              | @4000         | -220       | -              | RNAV1                    |

| Serial number                                                                                      | Path Terminator | Waypoint identifier | Fly-over | Course/Track °M (°T) | Magnetic variation | Distance (NM) | Turn direction | Altitude (ft) | Speed (kt) | VPA/TCH (°/ft) | Navegation specification |
|----------------------------------------------------------------------------------------------------|-----------------|---------------------|----------|----------------------|--------------------|---------------|----------------|---------------|------------|----------------|--------------------------|
| <div>MADAS (IAF)</div> <div>required.</div> <div>Subject to GCD51, GCD53 and GCD54 activity.</div> |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                                | IF              | MADAS               | -        | -                    | +3.5               | -             | -              | +6000         | -220       | -              | RNAV1                    |
| 002                                                                                                | TF              | TIPUX               | -        | 151 (148.0)          | +3.5               | 7.4           | -              | +2500         | -          | -              | RNAV1                    |
| MISSED APCH                                                                                        |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                                | CA              | -                   | -        | 205 (201.4)          | +3.5               | -             | -              | +1100         | -          | -              | RNAV1                    |
| 002                                                                                                | DF              | LP515               | -        | -                    | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                                | TF              | LP516               | -        | 126 (122.1)          | +3.5               | 3.5           | -              | -             | -200       | -              | RNAV1                    |
| 004                                                                                                | CA              | -                   | -        | 060 (056.3)          | +3.5               | -             | -              | +3000         | -210       | -              | RNAV1                    |
| 005                                                                                                | VM              | -                   | -        | 060 (056.3)          | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| MISSED APCH COMMUNICATIONS FAILURE                                                                 |                 |                     |          |                      |                    |               |                |               |            |                |                          |
| 001                                                                                                | CA              | -                   | -        | 205 (201.4)          | +3.5               | -             | -              | +1100         | -          | -              | RNAV1                    |
| 002                                                                                                | DF              | LP515               | -        | -                    | +3.5               | -             | -              | -             | -          | -              | RNAV1                    |
| 003                                                                                                | TF              | LP516               | -        | 126 (122.1)          | +3.5               | 3.5           | -              | -             | -200       | -              | RNAV1                    |
| 004                                                                                                | TF              | LP517               | -        | 060 (056.3)          | +3.5               | 3.6           | -              | @3000         | -210       | -              | RNAV1                    |
| 005                                                                                                | TF              | ENETA               | -        | 060 (056.3)          | +3.5               | 15.1          | -              | @4000         | -220       | -              | RNAV1                    |

HOLDING PATTERN

| Path terminator | Waypoint identifier | Course/Track °M (°T) | Magnetic variation | Distance/ Outbound time | Turn direction | MNM altitude (ft) | MAX altitude (ft) | Speed (kt) | Navigation specification |
|-----------------|---------------------|----------------------|--------------------|-------------------------|----------------|-------------------|-------------------|------------|--------------------------|
| HM              | ENETA (1)           | 260 (256.4)          | +3.5               | 1                       | R              | 5000 (2)          | -                 | -220       | RNAV1                    |
| HM              | LALTO (3)           | 230 (226.4)          | +3.5               | 1                       | L              | 5000              | -                 | -220       | RNAV1                    |
| HM              | LPC (4)             | 024 (020.9)          | +3.5               | 1                       | R              | FL075             | -                 | -210       | RNAV1                    |

| Path terminator                                                                                                                                                                                                                                                                                                                                                                                      | Waypoint identifier | Course/Track °M (°T) | Magnetic variation | Distance/ Outbound time | Turn direction | MNM altitude (ft) | MAX altitude (ft) | Speed (kt) | Navigation specification |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|--------------------|-------------------------|----------------|-------------------|-------------------|------------|--------------------------|
| HM                                                                                                                                                                                                                                                                                                                                                                                                   | MADAS (5)           | 201 (197.3)          | +3.5               | 1                       | R              | 6000              | -                 | -220       | RNAV1                    |
| <div>(1) GNSS or (DME/DME) or (DME/DME/IRU) required;<br/>- DME LPC, GDV must be operational for (DME/DME).<br/>- DME LPC must be operational for (DME/DME/IRU).<br/>(2) Minimum altitude 4000 ft under ATC clearance and missed APCH.<br/>(3) GNSS required.<br/>(4) GNSS o (DME/DME) required;<br/>- DME LPC must be operational for (DME/DME).<br/>(5) Subject to GCD53 and GCD75 activity.</div> |                     |                      |                    |                         |                |                   |                   |            |                          |