

## List of pages in this Trip Kit

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Airport Information For GCXO

Terminal Charts For GCXO

Revision Letter For Cycle 01-2014

Change Notices

Notebook

General Information

Location: Tenerife-North Xje  
IATA Code: TFN  
Lat/Long: N28° 29.0' W016° 20.5'  
Elevation: 2077 ft

Airport Use: Public  
Magnetic Variation: 5.5°W

Fuel Types: 100 Octane (LL), Jet A-1  
Customs: Yes  
Airport Type: IFR  
Landing Fee: Yes  
Control Tower: Yes  
Jet Start Unit: No  
LLWS Alert: No  
Beacon: No

Sunrise: 0759 Z  
Sunset: 1823 Z,

Runway Information

Runway: 12  
Length x Width: 10404 ft x 148 ft  
Surface Type: asphalt  
TDZ-Elev: 2077 ft  
Lighting: Edge, ALS, Centerline, REIL

Runway: 30  
Length x Width: 10404 ft x 148 ft  
Surface Type: asphalt  
TDZ-Elev: 2030 ft  
Lighting: Edge, ALS, Centerline, TDZ

Communication Information

ATIS 118.575  
Tenerife Tower 121.85  
Tenerife Tower 121.7  
Tenerife Tower 120.0 Secondary  
Tenerife Tower 118.7  
Tenerife Tower 25.78 Military  
Tenerife Approach Control 128.85 Secondary  
Tenerife Approach Control 124.8

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## 1. GENERAL

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### 1.1. ATIS

\*ATIS 118.57

### 1.2. NOISE ABATEMENT PROCEDURES

#### 1.2.1. AUXILIARY POWER UNITS (APUs)

Restrictions to stand positions

At the stand positions: T1 thru T6 and 6 thru 11:

- It is obligatory to use the 400 Hz facilities.
- The use of the ACFT Auxiliary Power Unit (APU) is forbidden in these stands in the period between 2 min after blocks for arrivals and 5 min before off-blocks for departures.
- The ACFT APU will only be able to be used when the 400 Hz fixed units are not operative and the mobile units are not available.

### 1.3. LOW VISIBILITY PROCEDURES (LVP)

#### 1.3.1. GENERAL

Besides general procedures, Low Visibility Procedures (LVP) will be applied when:

- RVR is 1700m or below.
- Ceiling is 350'/107m for RWY 12 or 450'/137m for RWY 30 or below.

The appropriate ATC services will inform pilots about the application of LVP.

ATIS system will provide the following message: "LVP in operation".

Any incident notified or detected that may affect the LVP as well as the variations of the operative minimum must be immediately communicated to pilots and ATC services implicated.

When RVR is 600m or below or for CAT E ACFT and RVR 900m or below, 'only one ACFT in the manoeuvring area' criteria will be followed.

Low Visibility Procedures will be cancelled when:

- RVR values equal or greater than 2000m.
- Ceiling is equal or greater than 800'.

#### 1.3.2. GROUND MOVEMENT

At all times pilots must be aware of the ACFT position, especially at intersections. Pilots have to make sure that taxiing is being executed under total security conditions.

In case of disorientation or in doubt, the ACFT must be stopped. ATC has to be informed immediately and a follow-me must be requested. In low visibility conditions, RWY exit routes E1, E2, E3 and E4 will be closed, only E0 and E5 in service.

In low visibility conditions, ATC will not authorize the push-back or the TWY occupation by ACFT with wingspan equal or higher than 171'/52m, until landing by other existing traffic on final approach has been completed.

#### 1.3.3. ARRIVALS

After landing the RWY must be vacated at the RWY end except if otherwise instructed.

- Pilot have to report RWY vacated.
- After reaching the assigned gate, pilots have to wait for a follow-me and notify ATC when it is in sight.
- Notify ATC prior leaving frequency.

#### 1.3.4. DEPARTURES

When requesting Start-up the pilot will notify ATC the complete ACFT indicator and the occupied stand. After pilots have requested Start-up clearance the ACFT should be ready to start engines immediately or in less than 10 minutes.

#### 1.3.5. PUSH-BACK MANOEUVRES

After receiving taxi clearance pilots must be ready to push-back and taxi within 5 min. If unable inform ATC.

Push-back manoeuvres will not be cleared at the same time.

---

## 1. GENERAL

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### 1.3.6. COMMUNICATION FAILURE

- Departing ACFT proceed to clearance limit, hold position and wait for a follow-me.
- Arriving ACFT vacate RWY, proceed to holding position and wait for a follow-me.

### 1.4. SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM

#### 1.4.1. OPERATION OF MODE S TRANSPONDER WHEN ACFT IS ON THE GROUND

ACFT operators shall ensure that the Mode S transponders are able to operate when the ACFT is on the ground.

Pilots shall select AUTO mode and assigned Mode A code.

If the AUTO mode is not available, select ON (e.g. XPDR) and assigned Mode A code:

- from the request for push-back or taxi, whichever is earlier.
- after landing continuously until ACFT is fully parked on stand.
- when fully parked on stand, select STBY.

Whenever ACFT is capable of reporting ACFT ident (i.e. callsign used in flight) ident should also be entered through FMS or transponder control panel from the request for push-back or taxi, whichever is earlier. Aircrew must use the ICAO defined format to enter ACFT ident (e.g. BAW 123, AFR 6380, etc.).

To ensure that the performance of systems based on SSR frequencies (including airborne TCAS units and SSR radars) is not compromised, TCAS should not be selected before receiving the clearance to line up. It should then be deselected after vacating the RWY.

ACFT taxiing without a flight plan should select Mode A code 1000.

### 1.5. TAXI PROCEDURES

TWY E-2 and E-3 MAX wingspan 98'/30m.

### 1.6. PARKING INFORMATION

Push-back required for all stands except stand 1A and 13. On stand 13 push-back possible.

### 1.7. OTHER INFORMATION

#### 1.7.1. GENERAL

CAUTION: Birds on APT.

RWY 30 right-hand circuit.

#### 1.7.2. VISIBILITY

The geographic location of Tenerife-North causes a concentration of wet air masses which reach the condensation conditions at the same level of the APT elevation.

Due to this, cloud masses form over the RWY reducing the visibility. It is not strange that sector of the RWY is completely clear while visibility is almost nil at the rest of the RWY.

This kind of cloud masses passing over the APT is more frequent in the month between April and October.

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## 2. ARRIVAL

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### 2.1. SPEED RESTRICTION

MAX 250 KT at or below FL150 after SLP.

### 2.2. CAT II/III OPERATIONS

RWY 30 approved for CAT II/III operations, special aircrew and ACFT certification required.

### 2.3. RWY OPERATIONS

ACFT landing on RWY 30 will vacate the RWY by E-0 or E-1. To reach maximum RWY utilisation, lessens its occupancy time and minimises the occurrence of "go-around" manoeuvres, ACFT shall maintain speed until reach indicated exit TWY by ATC.

### 2.4. TAXI PROCEDURES

All ACFT landing by RWY 12, will vacate the RWY by E-4 or E-5.  
ATC could authorize to exit by other TWY whenever necessary.

### 2.5. OTHER INFORMATION

#### 2.5.1. WIND PHENOMENA

Orographic conditions on Tenerife island and the APT location contribute to the appearance of windshear and turbulence phenomena in determined circumstances:

- When Northerly direction winds (between 320° and 360°) and an intensity more than 12 KT, there is the possibility of strong turbulence and windshear on the approach (short final position) and threshold of RWY 30.
- When winds with direction between 150° and 210° and an intensity more than 20 KT, there is the possibility of turbulence on the approach to RWY 12.
- When Westerly and South-westerly direction winds above 10000 ', it is very probably the existence of turbulence areas originated from the Teide mountain. This kind of turbulence usually appears in a sudden, violent and short way.

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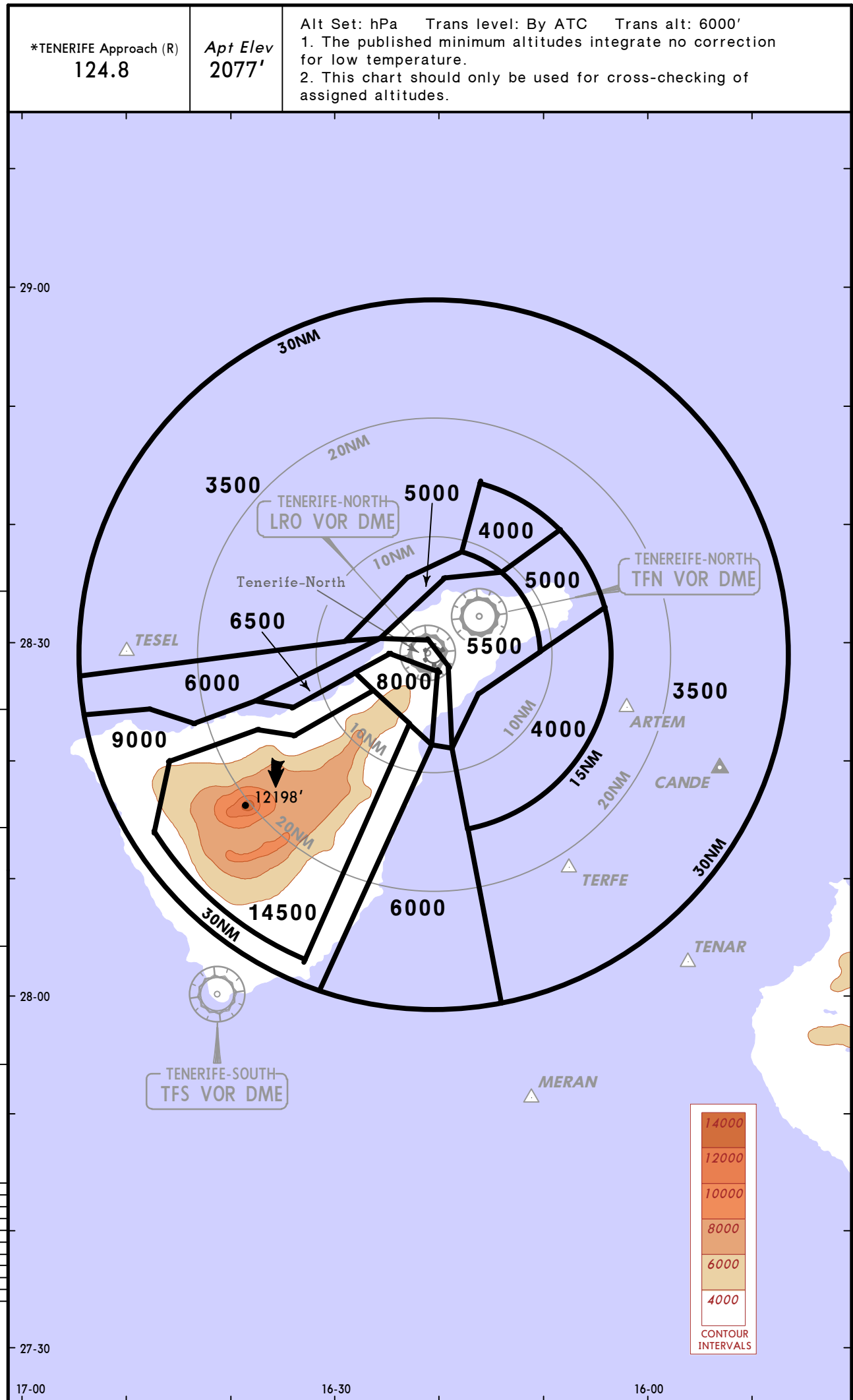
## 3. DEPARTURE

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### 3.1. OTHER INFORMATION

#### 3.1.1. VISIBLE DISTANCE IN RWY

Because of the RWY longitudinal profile, starting the take-off from threshold RWY 12, it is possible to lose the visual references in relation to the RWY end.

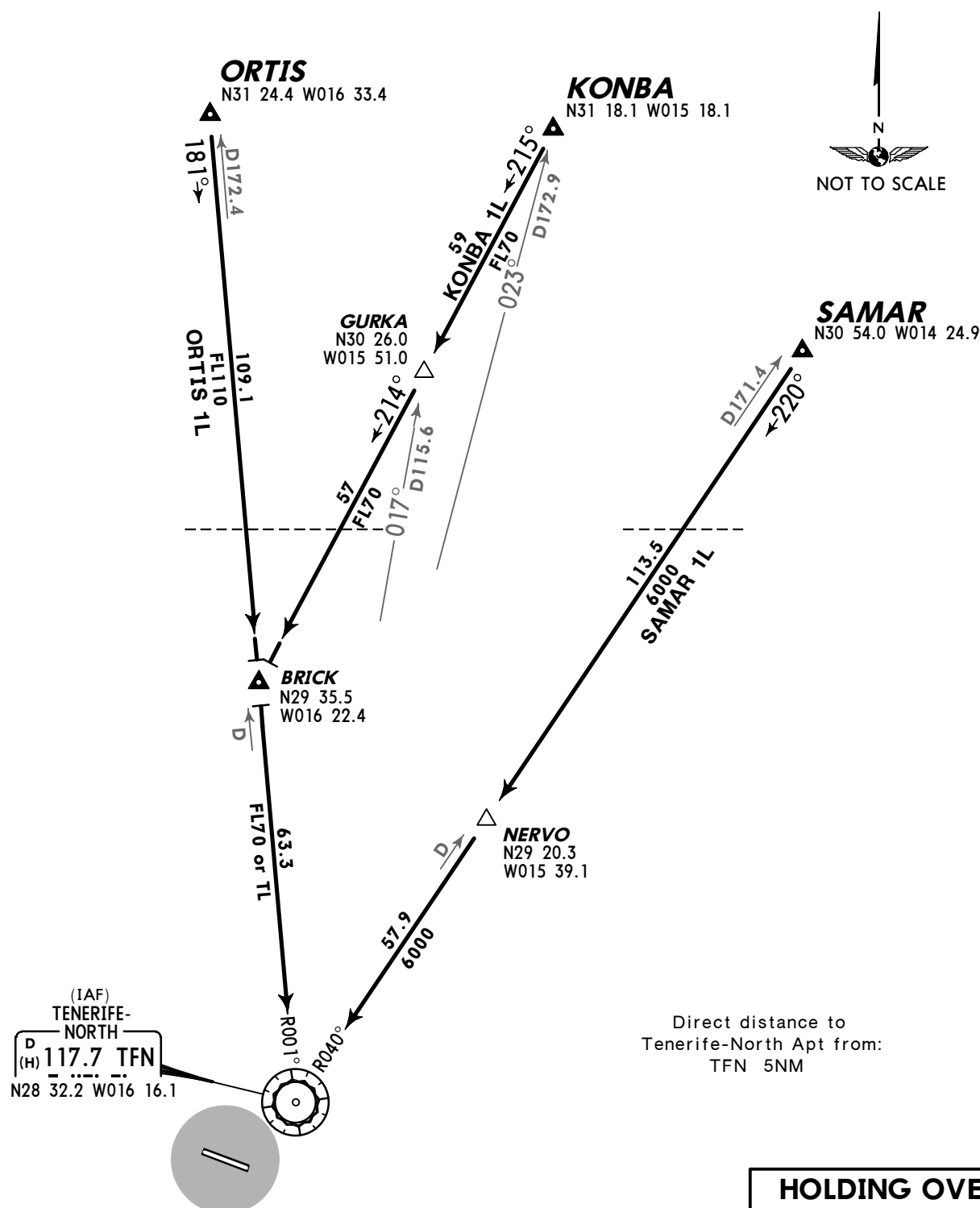


\*ATIS  
118.57

Apt Elev  
2077'

Alt Set: hPa  
Trans level: By ATC Trans alt: 6000'

KONBA ONE LIMA (KONBA 1L) [KONB1L]  
ORTIS ONE LIMA (ORTIS 1L) [ORTI1L]  
SAMAR ONE LIMA (SAMAR 1L) [SAMA1L]  
RWYS 12, 30 ARRIVALS



#### SPEED RESTRICTION

MAX 250 KT at or below FL150  
within speed reduction area, except  
for military aircraft or  
if danger areas are active.

----- Speed Reduction Area

#### HOLDING OVER TFN



\*ATIS  
118.57Apt Elev  
2077'Alt Set: hPa  
Trans level: By ATC Trans alt: 6000'

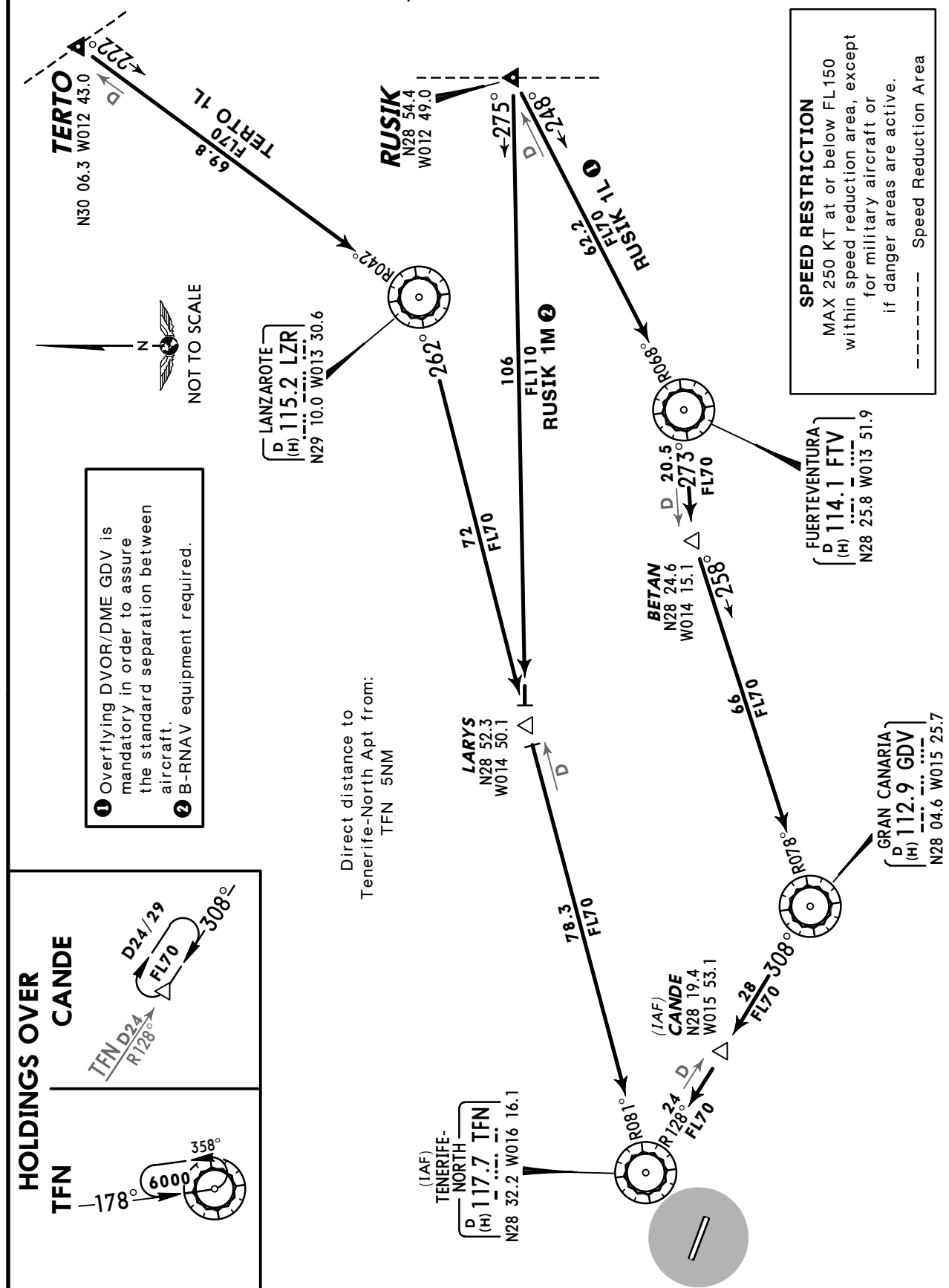
RUSIK ONE LIMA (RUSIK 1L) [RUSI1L] ①

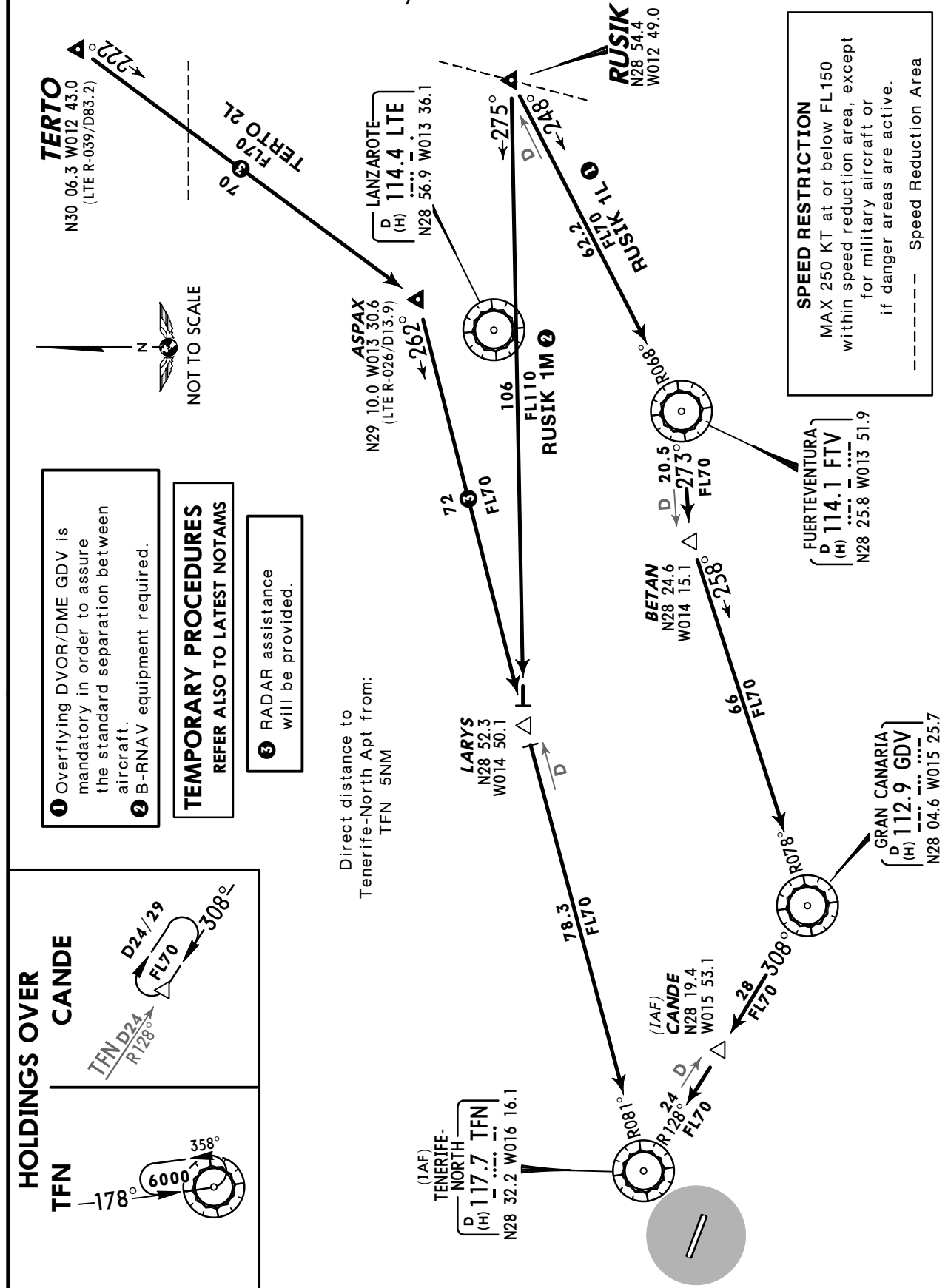
TERTO ONE LIMA (TERTO 1L) [TERT1L]

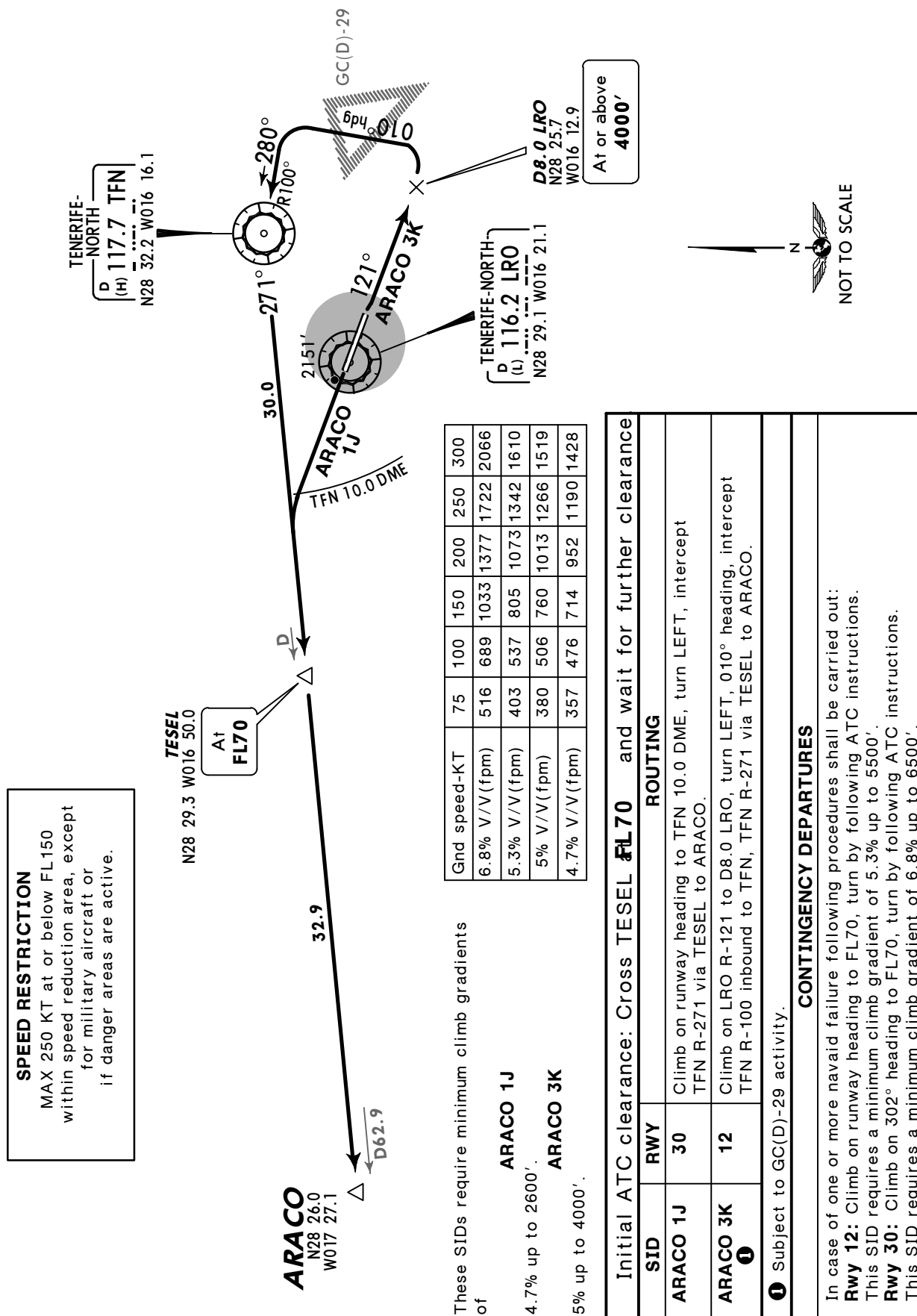
RWYS 12, 30 ARRIVALS

RUSIK ONE MIKE (RUSIK 1M) [RUSI1M] ②

RWYS 12, 30 RNAV ARRIVAL



\*ATIS  
118.57Apt Elev  
2077'Alt Set: hPa  
Trans level: By ATC Trans alt: 6000'RUSIK ONE LIMA (RUSIK 1L) [RUS11L] ①  
TERTO TWO LIMA (TERTO 2L) [TERT2L]  
RWYS 12, 30 ARRIVALSRUSIK ONE MIKE (RUSIK 1M) [RUS11M] ②  
RWYS 12, 30 RNAV ARRIVAL

Apt Elev  
2077'Trans level: By ATC    Trans alt: 6000'  
RWY 30: EXPECT close-in obstacles.ARACO ONE JULIETT (ARACO 1J) [ARAC1J]  
ARACO THREE KILO (ARACO 3K) [ARAC3K]  
RWYS 30, 12 DEPARTURES

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Apt Elev  
2077'

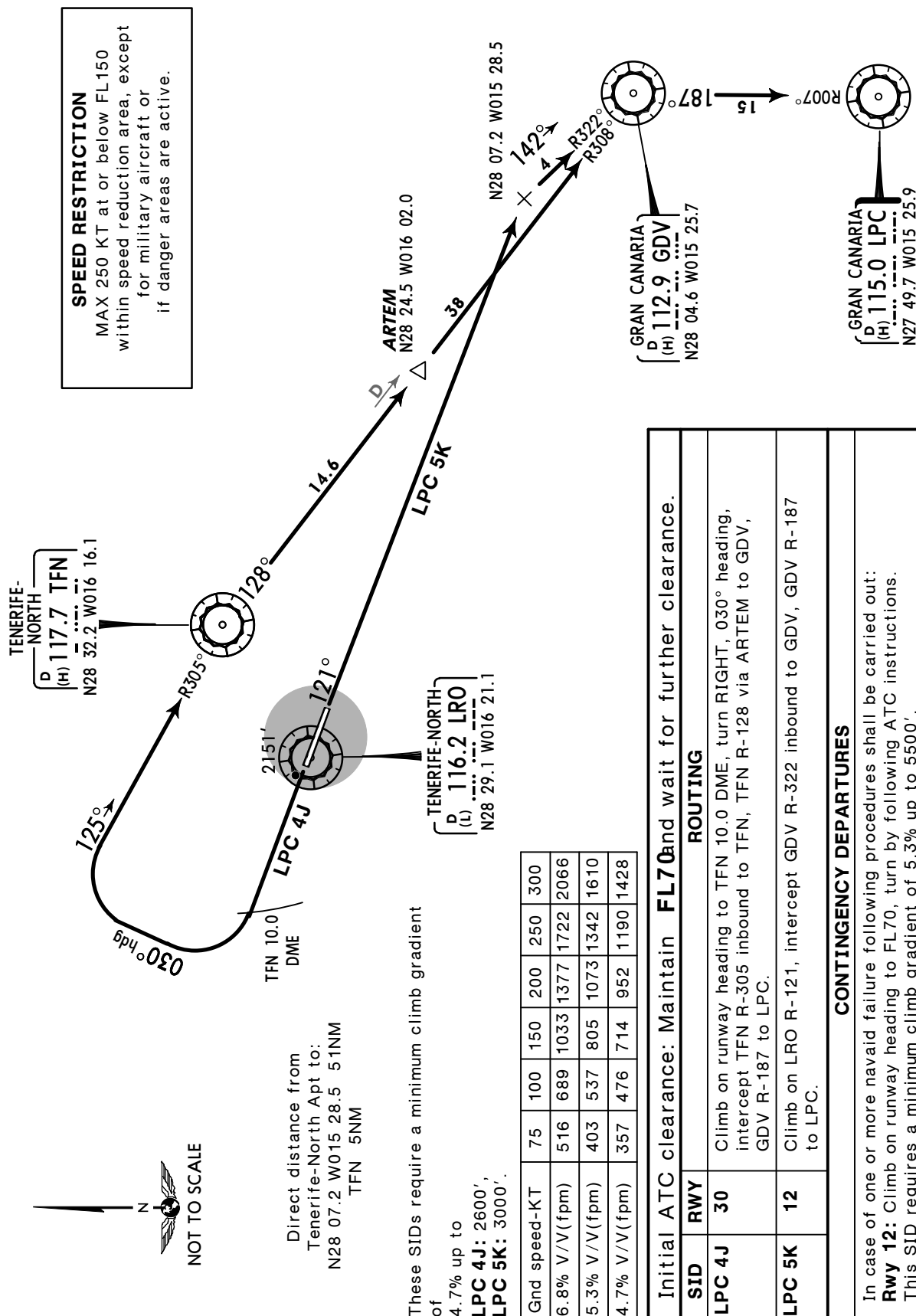
Trans level: By ATC Trans alt: 6000'

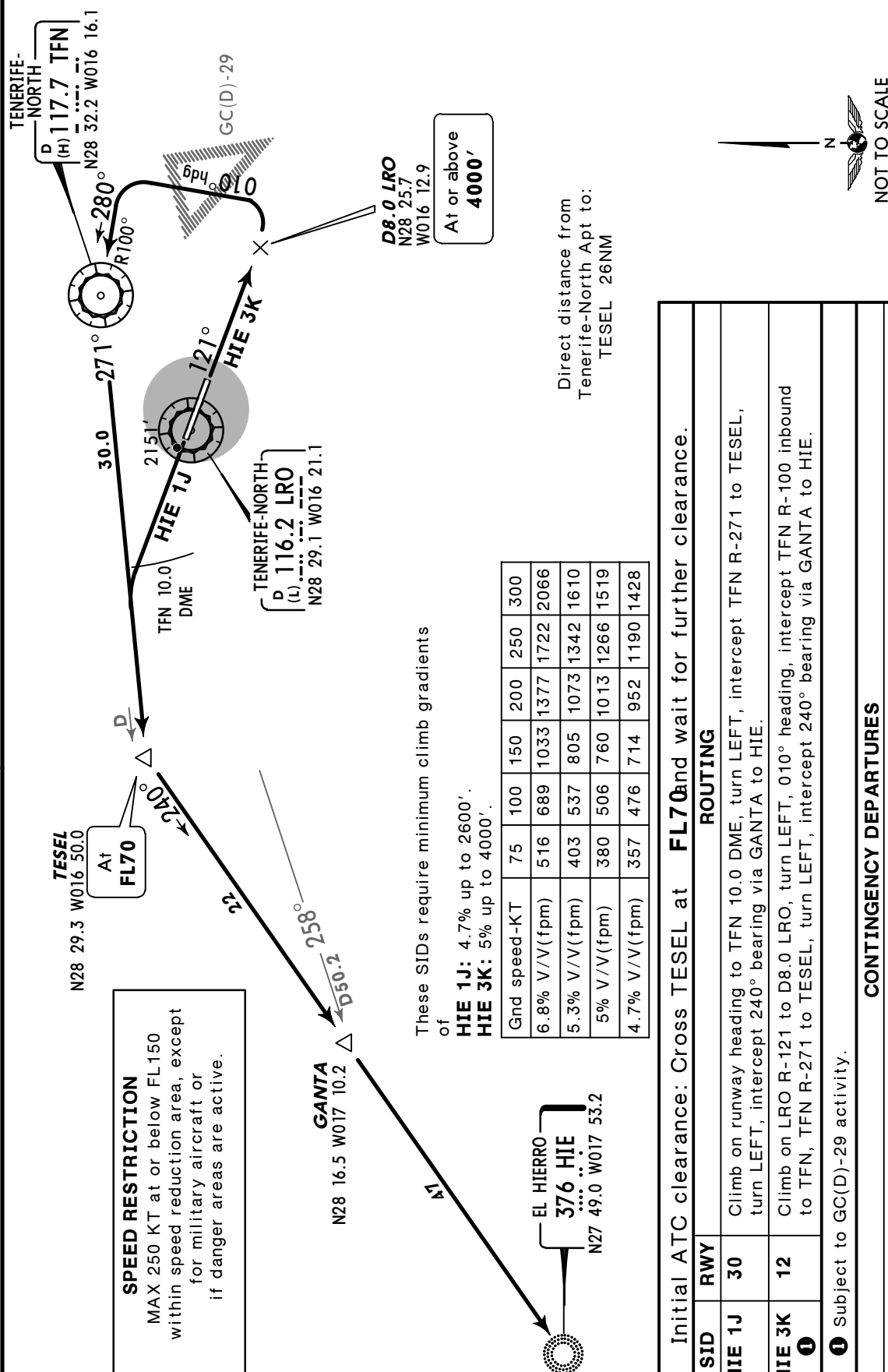
1. RWY 30: EXPECT close-in obstacles.

2. Overflying DVOR/DME GDV is mandatory in order to assure the standard separation between aircraft.

GRAN CANARIA FOUR JULIETT (LPC 4J)  
GRAN CANARIA FIVE KILO (LPC 5K)  
RWYS 30, 12 DEPARTURES

## SPEED RESTRICTION

MAX 250 KT at or below FL150  
within speed reduction area, except  
for military aircraft or  
if danger areas are active.

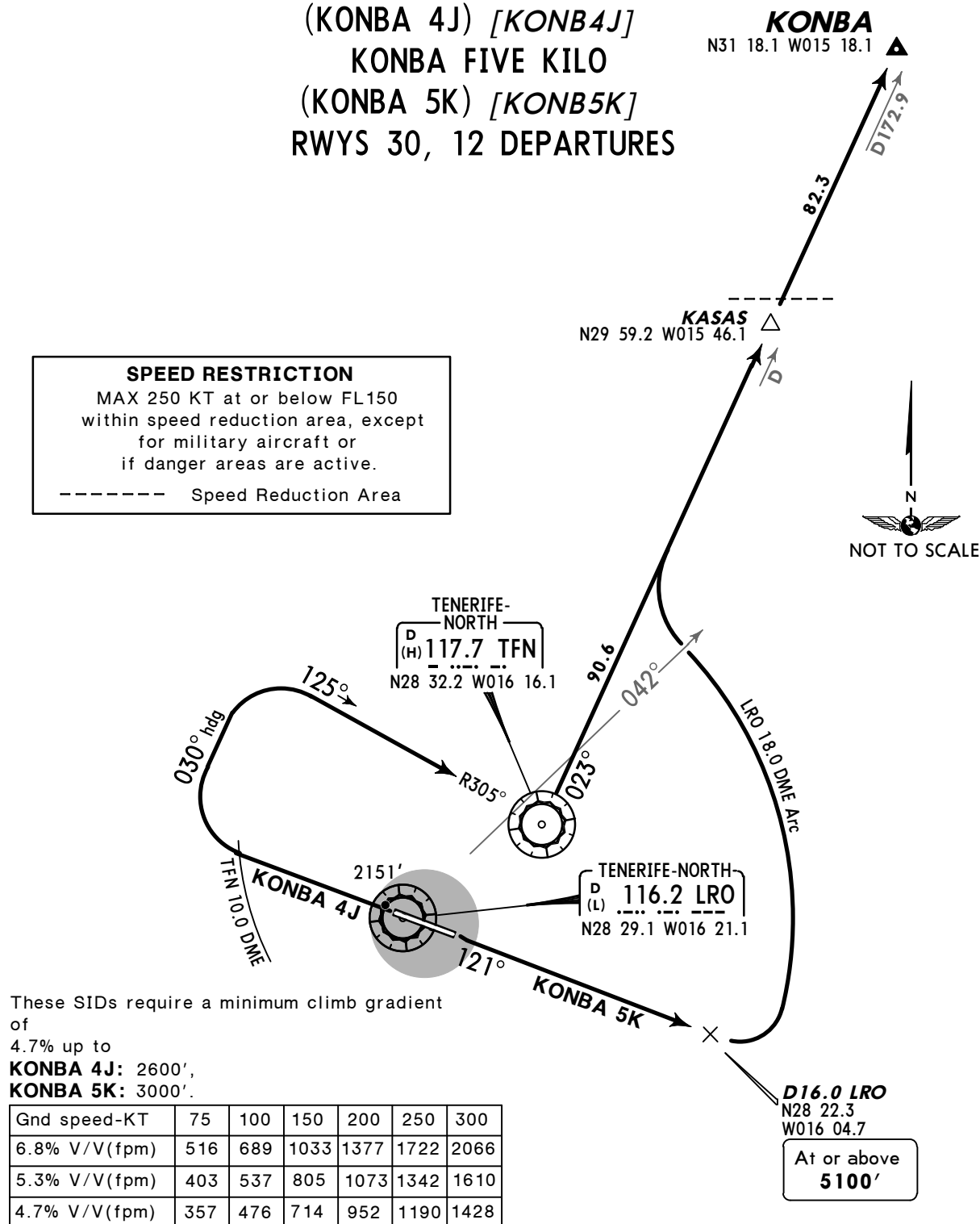
Apt Elev  
2077'Trans level: By ATC    Trans alt: 6000'  
RWY 30: EXPECT close-in obstacles.HIERRO ONE JULIETT (HIE 1J)  
HIERRO THREE KILO (HIE 3K)  
RWYS 30, 12 DEPARTURES

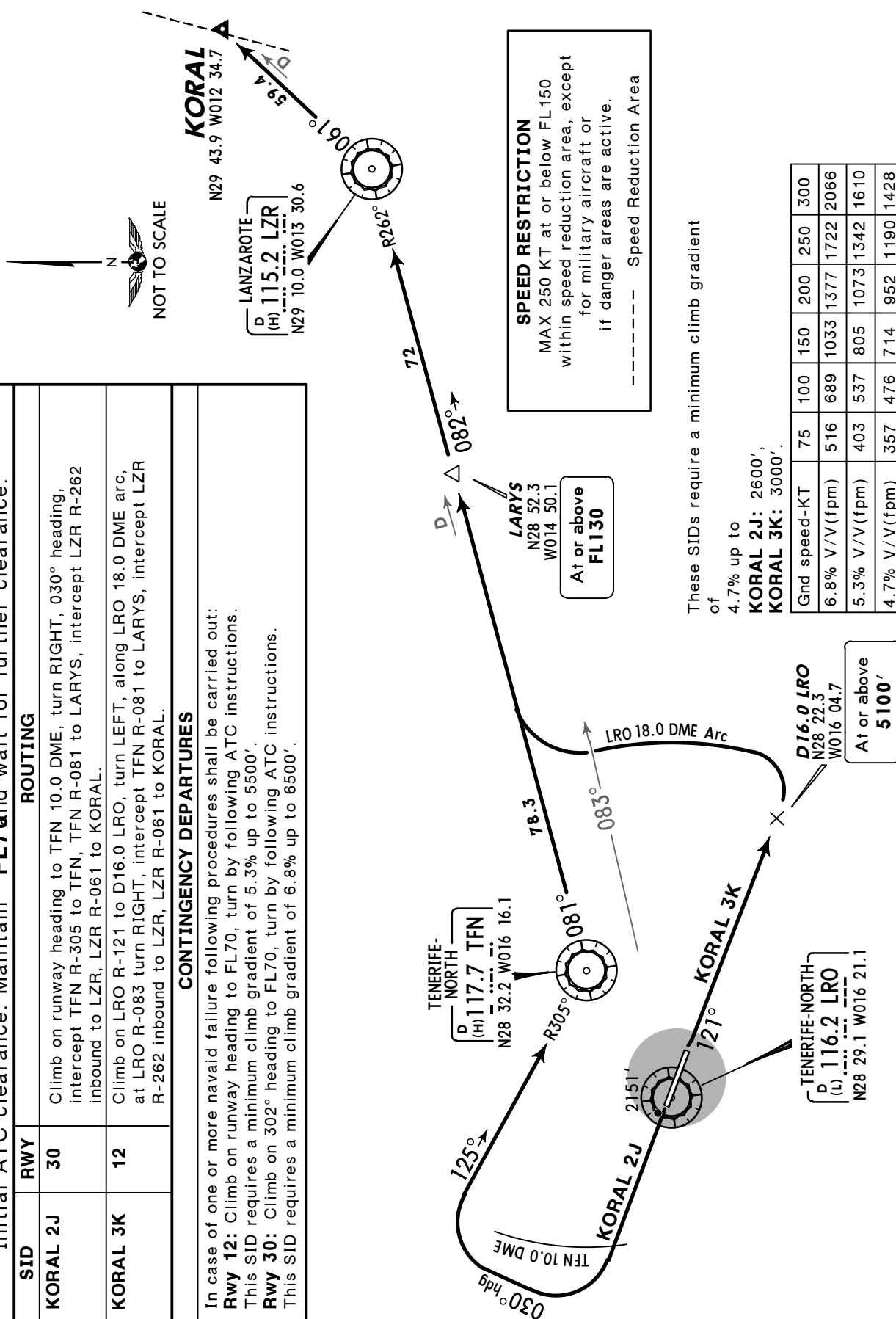
Apt Elev  
2077'

Trans level: By ATC    Trans alt: 6000'  
RWY 30: EXPECT close-in obstacles.

**KONBA FOUR JULIETT**  
(KONBA 4J) [KONB4J]  
**KONBA FIVE KILO**  
(KONBA 5K) [KONB5K]  
**RWYS 30, 12 DEPARTURES**

**SPEED RESTRICTION**  
MAX 250 KT at or below FL150  
within speed reduction area, except  
for military aircraft or  
if danger areas are active.  
----- Speed Reduction Area



Apt Elev  
2077'Trans level: By ATC    Trans alt: 6000'  
RWY 30: EXPECT close-in obstacles.KORAL TWO JULIETT (KORAL 2J) [KORA2J]  
KORAL THREE KILO (KORAL 3K) [KORA3K]  
RWYS 30, 12 DEPARTURES

Apt Elev  
2077'

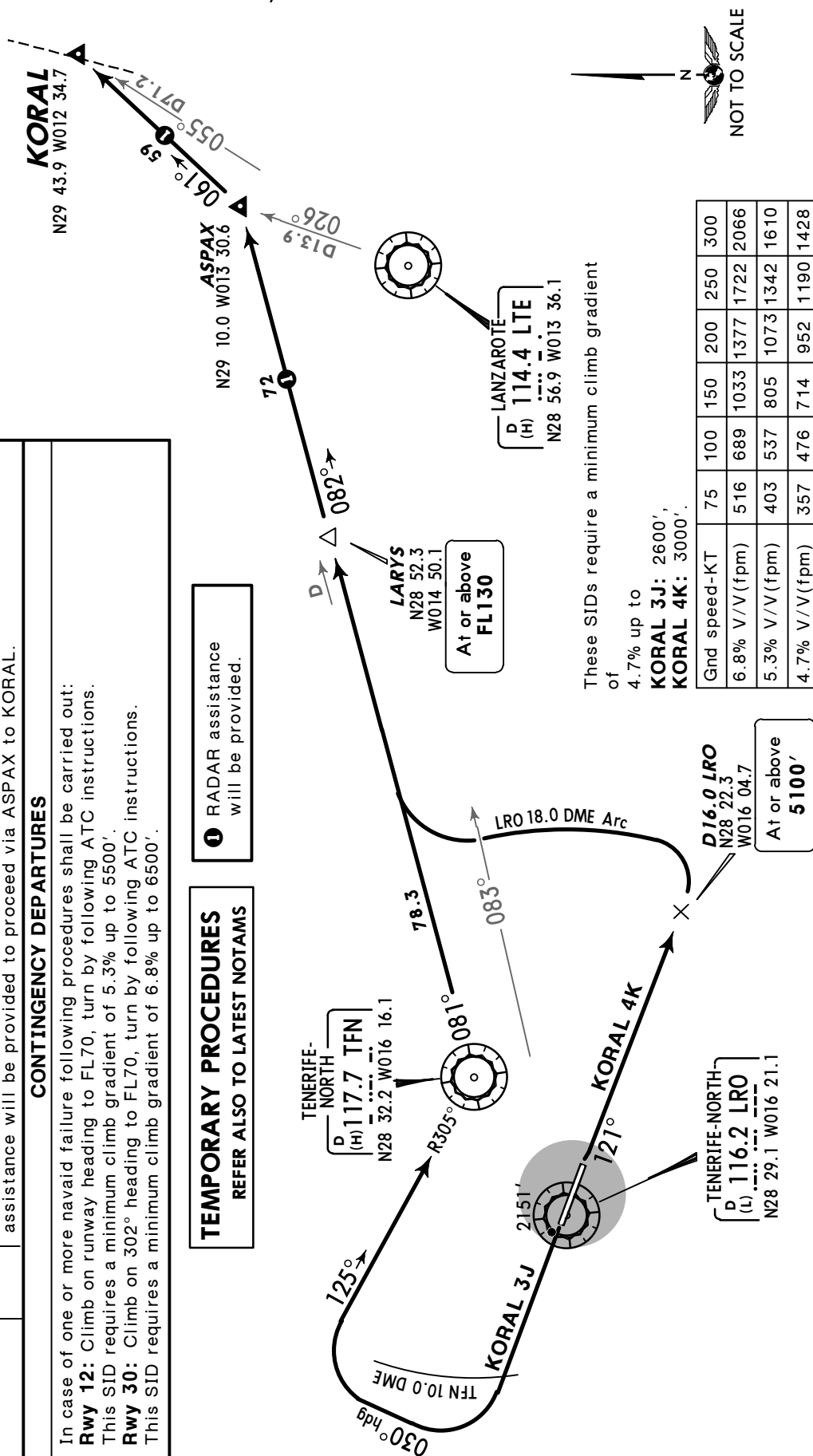
Trans level: By ATC    Trans alt: 6000'  
RWY 30: EXPECT close-in obstacles.

KORAL THREE JULIETT(KORAL 3J) [KORA3J]  
KORAL FOUR KILO (KORAL 4K) [KORA4K]  
RWYS 30, 12 DEPARTURES

SPEED RESTRICTION

MAX 250 KT at or below FL150  
within speed reduction area, except  
for military aircraft or  
if danger areas are active.

----- Speed Reduction Area



Apt Elev  
2077'

Trans level: By ATC    Trans alt: 6000'  
RWY 30: EXPECT close-in obstacles.

LANZAROTE THREE JULIETT (LTE 3J)  
LANZAROTE FOUR KILO (LTE 4K)  
RWYS 30, 12 DEPARTURES

SPEED RESTRICTION

MAX 250 KT at or below FL150  
within speed reduction area, except  
for military aircraft or  
if danger areas are active.

Initial ATC clearance: Maintain **FL70** and wait for further clearance.

ROUTING

| SID    | RWY |                                                                                                                                                                                      |
|--------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LTE 3J | 30  | Climb on runway heading to TFN 10.0 DME, turn RIGHT, 030° heading, intercept TFN R-305 inbound to TFN, TFN R-081 to LARYS, turn RIGHT, intercept LTE R-272 inbound via TADEK to LTE. |
| LTE 4K | 12  | Climb on LRO R-121 to D16.0 LRO, turn LEFT, along LRO 18.0 DME arc, at LRO R-083 turn RIGHT, intercept TFN R-081 to LARYS, turn RIGHT, intercept LTE R-272 inbound via TADEK to LTE. |

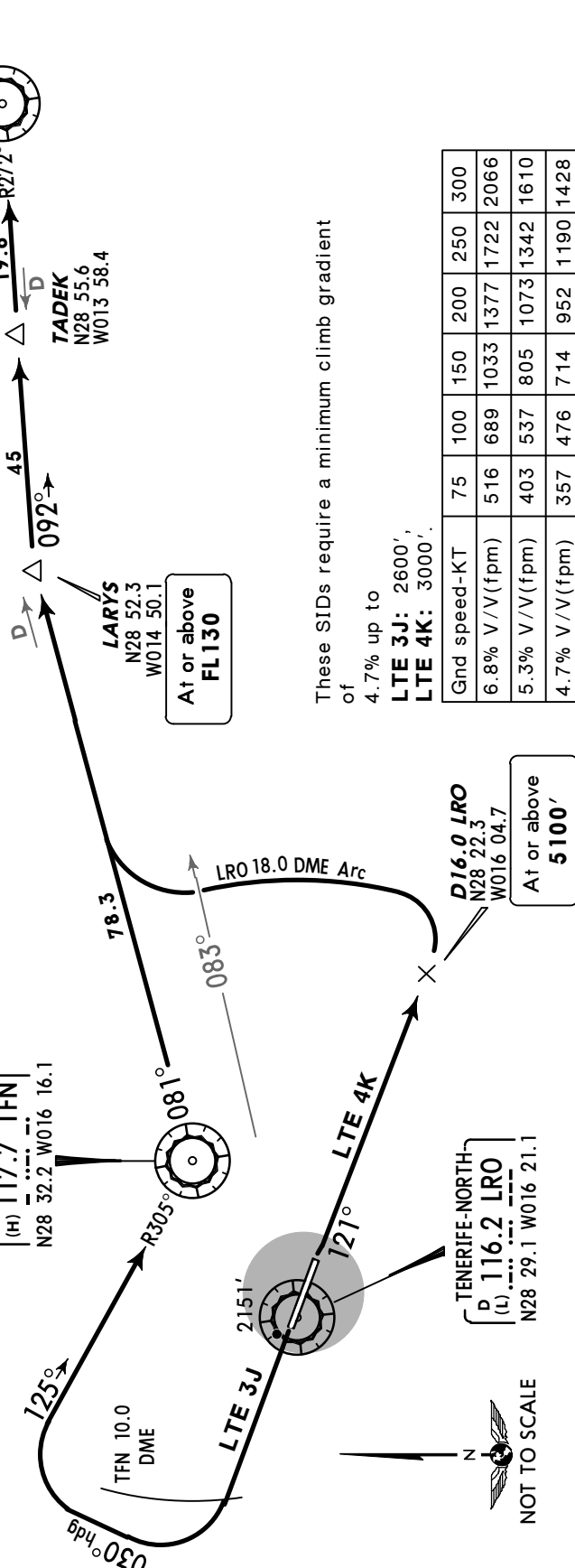
CONTINGENCY DEPARTURES

In case of one or more navaid failure following procedures shall be carried out:  
**Rwy 12:** Climb on runway heading to FL70, turn by following ATC instructions. This SID requires a minimum climb gradient of 5.3% up to 5500'.  
**Rwy 30:** Climb on 302° heading to FL70, turn by following ATC instructions. This SID requires a minimum climb gradient of 6.8% up to 6500'.

LANZAROTE  
D 114.4 LTE  
(H) N28 56.9 W013 36.1

Direct distance from  
Tenerife-North Apt to:  
TFN 5NM

TENERIFE-NORTH  
D 117.7 TFN  
(H) N28 32.2 W016 16.1



These SIDs require a minimum climb gradient  
of  
4.7% up to  
LTE 3J: 2600',  
LTE 4K: 3000'.

| Gnd speed-KT  | 75  | 100 | 150  | 200  | 250  | 300  |
|---------------|-----|-----|------|------|------|------|
| 6.8% V/V(fpm) | 516 | 689 | 1033 | 1377 | 1722 | 2066 |
| 5.3% V/V(fpm) | 403 | 537 | 805  | 1073 | 1342 | 1610 |
| 4.7% V/V(fpm) | 357 | 476 | 714  | 952  | 1190 | 1428 |

NOT TO SCALE

3. Overflying DVOR/DME GDU is mandatory in order to assure the standard separation between aircraft.

This SID requires a minimum climb gradient of 6.8% up to 6500'.

Apt Elev  
2077'

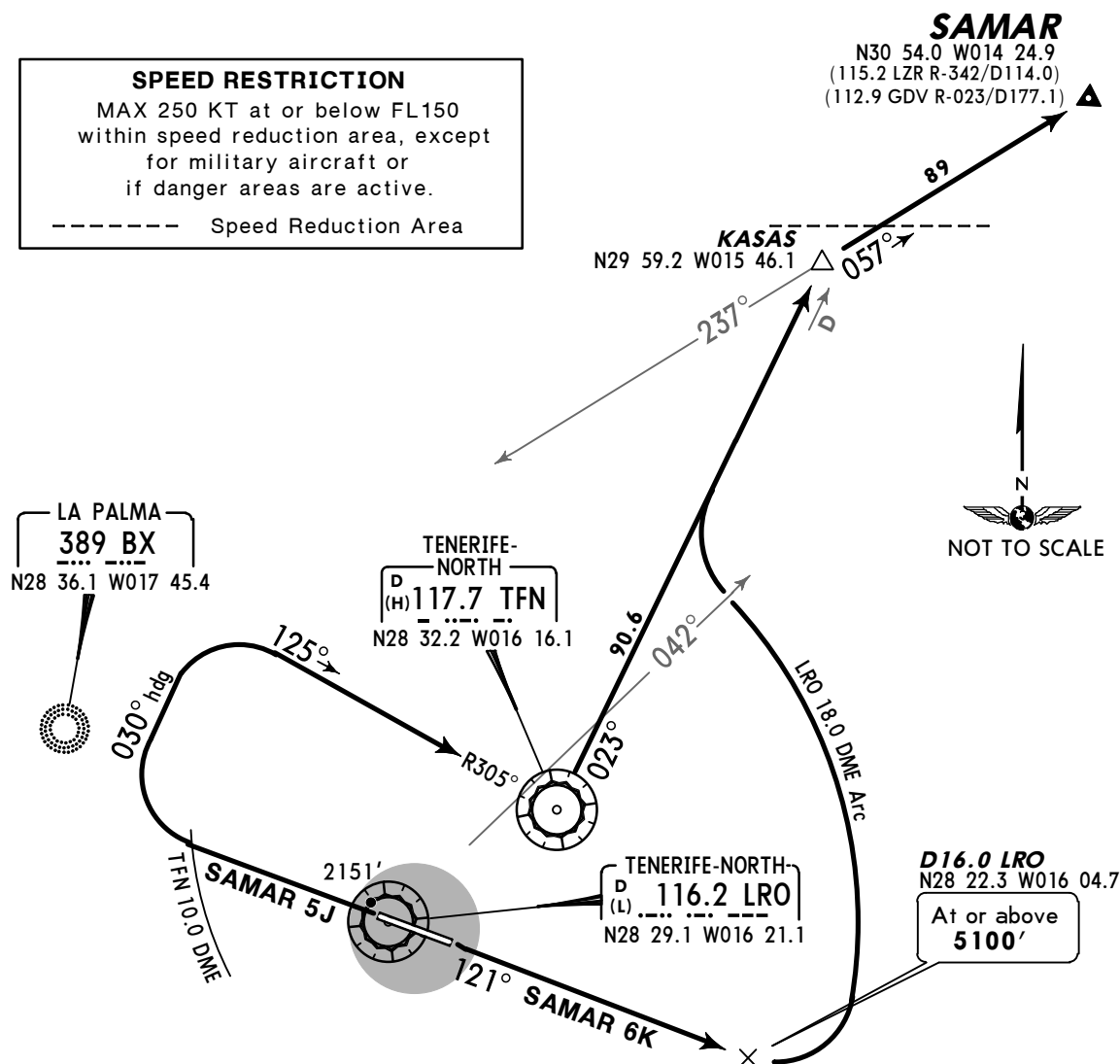
Trans level: By ATC    Trans alt: 6000'  
RWY 30: EXPECT close-in obstacles.

**SAMAR FIVE JULIETT (SAMAR 5J) [SAMA5J]  
SAMAR SIX KILO (SAMAR 6K) [SAMA6K]  
RWYS 30, 12 DEPARTURES**

**SPEED RESTRICTION**

MAX 250 KT at or below FL150  
within speed reduction area, except  
for military aircraft or  
if danger areas are active.

----- Speed Reduction Area



These SIDs require a minimum climb gradient of 4.7% up to  
**SAMAR 5J:** 2600',  
**SAMAR 6K:** 3000'.

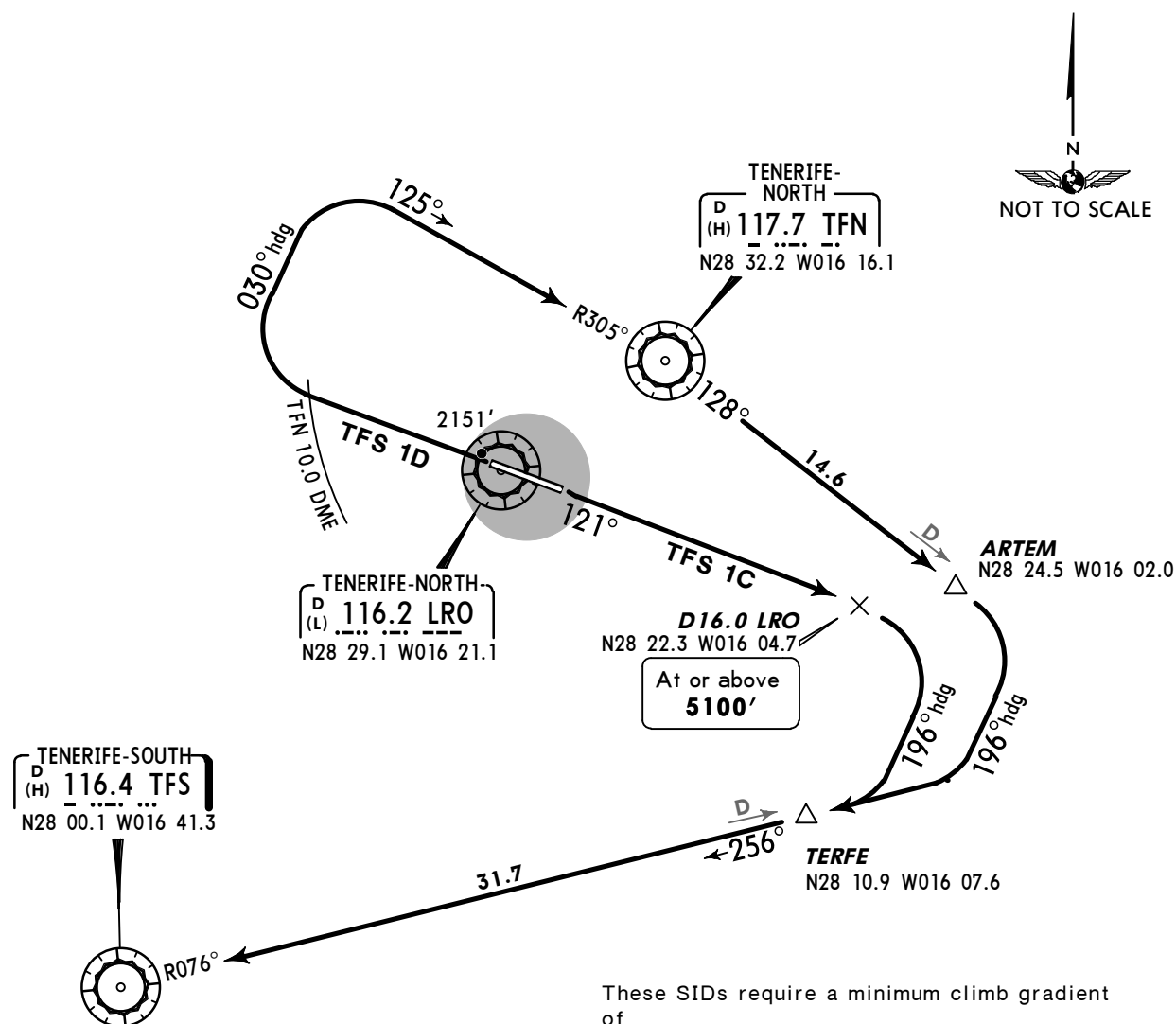
| Gnd speed-KT  | 75  | 100 | 150  | 200  | 250  | 300  |
|---------------|-----|-----|------|------|------|------|
| 6.8% V/V(fpm) | 516 | 689 | 1033 | 1377 | 1722 | 2066 |
| 5.3% V/V(fpm) | 403 | 537 | 805  | 1073 | 1342 | 1610 |
| 4.7% V/V(fpm) | 357 | 476 | 714  | 952  | 1190 | 1428 |

Initial ATC clearance: Maintain **FL70** and wait for further clearance.

| SID             | RWY       | ROUTING                                                                                                                                                                         |
|-----------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SAMAR 5J</b> | <b>30</b> | Climb on runway heading to TFN 10.0 DME, turn RIGHT, 030° heading, intercept TFN R-305 inbound to TFN, TFN R-023 to KASAS, turn RIGHT, intercept 057° bearing from BX to SAMAR. |
| <b>SAMAR 6K</b> | <b>12</b> | Climb on LRO R-121 to D16.0 LRO, turn LEFT, along LRO 18.0 DME arc, at LRO R-042 turn RIGHT, intercept TFN R-023 to KASAS, turn RIGHT, intercept 057° bearing from BX to SAMAR. |

**CONTINGENCY DEPARTURES**

In case of one or more navaid failure following procedures shall be carried out:  
**Rwy 12:** Climb on runway heading to FL70, turn by following ATC instructions.  
This SID requires a minimum climb gradient of 5.3% up to 5500'.  
**Rwy 30:** Climb on 302° heading to FL70, turn by following ATC instructions.  
This SID requires a minimum climb gradient of 6.8% up to 6500'.

Apt Elev  
2077'Trans level: By ATC    Trans alt: 6000'  
RWY 30: EXPECT close-in obstacles.TENERIFE SUR ONE CHARLIE (TFS 1C)  
TENERIFE SUR ONE DELTA (TFS 1D)  
RWYS 12, 30 DEPARTURESThese SIDs require a minimum climb gradient  
of  
4.7% up to**TFS 1C:** 3000',**TFS 1D:** 2600'.

| Gnd speed-KT  | 75  | 100 | 150  | 200  | 250  | 300  |
|---------------|-----|-----|------|------|------|------|
| 6.8% V/V(fpm) | 516 | 689 | 1033 | 1377 | 1722 | 2066 |
| 5.3% V/V(fpm) | 403 | 537 | 805  | 1073 | 1342 | 1610 |
| 4.7% V/V(fpm) | 357 | 476 | 714  | 952  | 1190 | 1428 |

Initial ATC clearance: Maintain **FL70** and wait for further clearance.

| SID           | RWY       | ROUTING                                                                                                                                                                                              |
|---------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TFS 1C</b> | <b>12</b> | Climb on LRO R-121 to D16.0 LRO, turn RIGHT, 196° heading, intercept TFS R-076 inbound via TERFE to TFS.                                                                                             |
| <b>TFS 1D</b> | <b>30</b> | Climb on runway heading to FL70, turn by following ATC instructions, intercept TFN R-305 inbound to TFN, TFN R-128 to ARTEM, turn RIGHT, 196° heading, intercept TFS R-076 inbound via TERFE to TFS. |

**CONTINGENCY DEPARTURES**

In case of one or more navaid failure following procedures shall be carried out:

**Rwy 12:** Climb on runway heading to FL70, turn by following ATC instructions.

This SID requires a minimum climb gradient of 5.3% up to 5500'.

**Rwy 30:** Climb on 302° heading to FL70, turn by following ATC instructions.

This SID requires a minimum climb gradient of 6.8% up to 6500'.

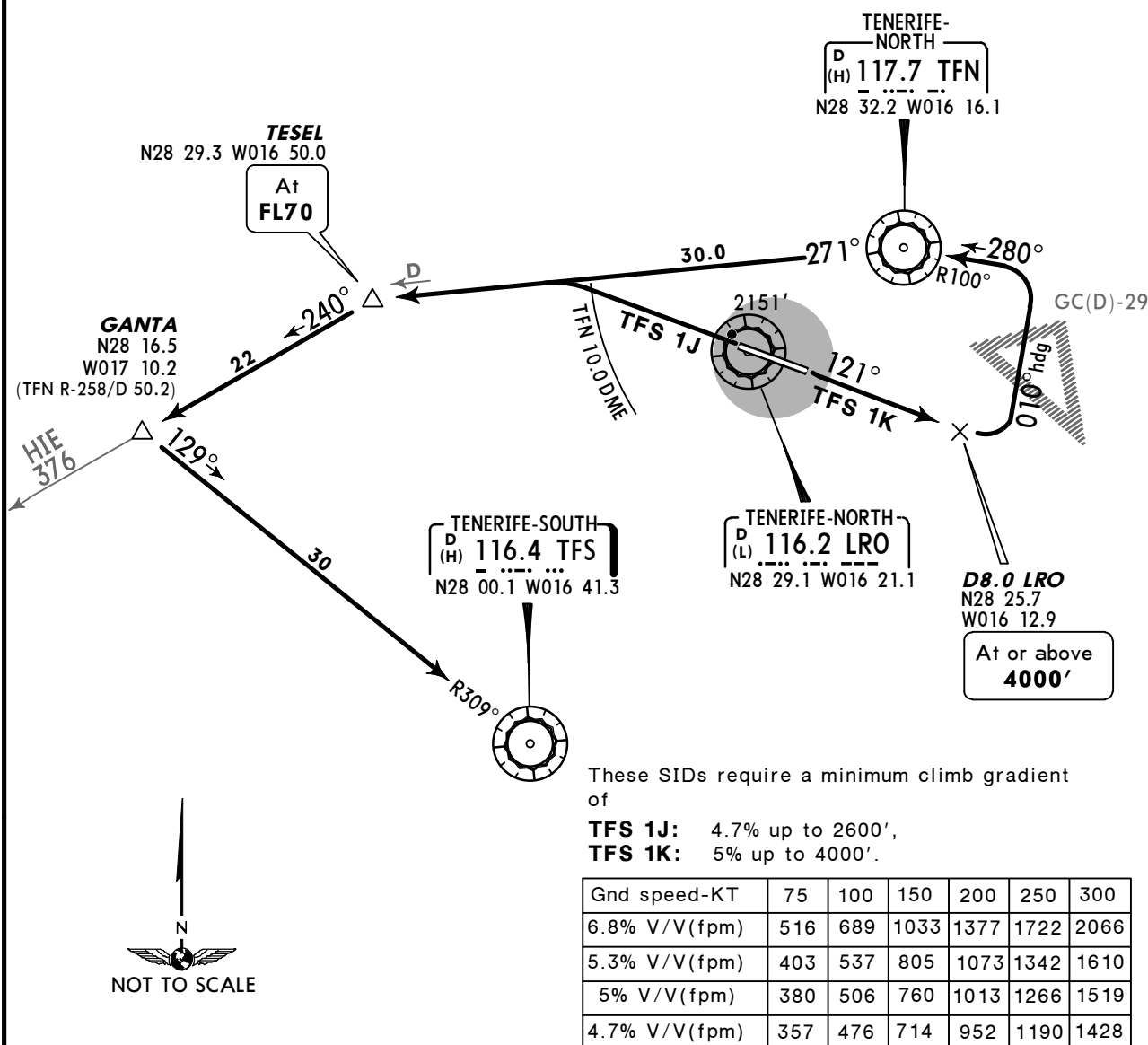
Apt Elev  
2077'

Trans level: By ATC    Trans alt: 6000'  
RWY 30: EXPECT close-in obstacles.

TENERIFE SUR ONE JULIETT (TFS 1J)

TENERIFE SUR ONE KILO (TFS 1K)

RWYS 30, 12 DEPARTURES



Initial ATC clearance:

**TFS 1J:** Maintain **FL70** and wait for further clearance.

**TFS 1K:** Cross **TESEL** at **FL70** and wait for further clearance.

| SID           | RWY       | ROUTING                                                                                                                                                                                                                |
|---------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TFS 1J</b> | <b>30</b> | Climb on runway heading to TFN 10.0 DME, turn LEFT, intercept TFN R-271° to TESEL, turn LEFT, intercept 240° bearing towards HIE to GANTA, turn LEFT, intercept TFS R-309° inbound to TFS.                             |
| <b>TFS 1K</b> | <b>12</b> | Climb on LRO R-121 to D8.0 LRO, turn LEFT, 010° heading, intercept TFN R-100 inbound TFN, TFN R-271° to TESEL, turn LEFT, intercept 240° bearing towards HIE to GANTA, turn LEFT, intercept TFS R-309° inbound to TFS. |

CONTINGENCY DEPARTURES

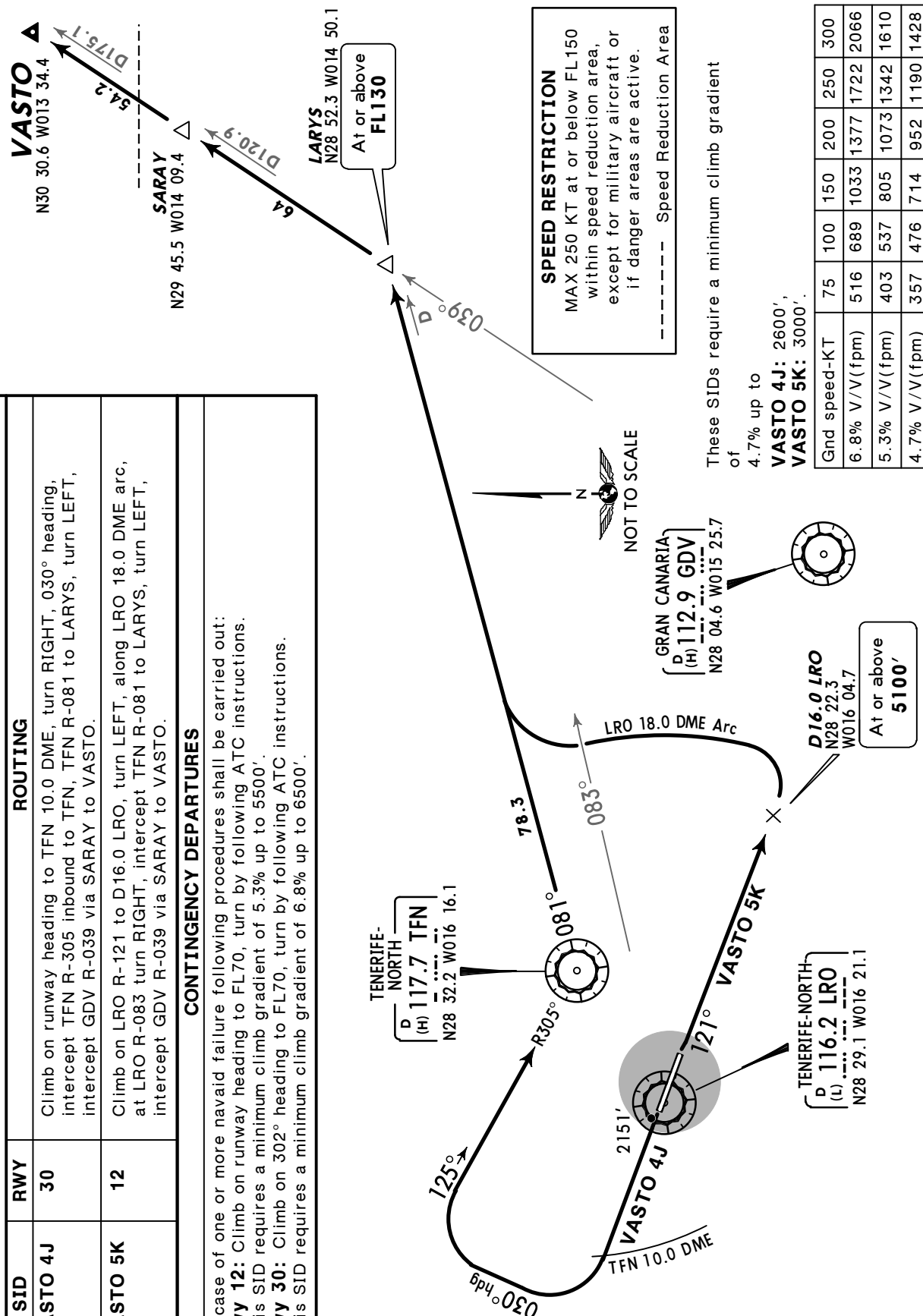
In case of one or more navaid failure following procedures shall be carried out:

**Rwy 12:** Climb on runway heading to FL70, turn by following ATC instructions.  
This SID requires a minimum climb gradient of 5.3% up to 5500'.

**Rwy 30:** Climb on 302° heading to FL70, turn by following ATC instructions.  
This SID requires a minimum climb gradient of 6.8% up to 6500'.

2. Due to restrictions of DVOR/DME GDV, and when its coverage is not sufficient below FL150, RADAR vectoring guidance will be provided.

VASTO FOUR JULIETT (VASTO 4J) [VAST4J]  
VASTO FIVE KILO (VASTO 5K) [VAST5K]  
RWYS 30, 12 DEPARTURES



Initial ATC clearance: Maintain **FL70** and wait for further clearance.

## ROUTING

|                 |           |                                                                                                                                                                               |
|-----------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>VASTO 4J</b> | <b>30</b> | Climb on runway heading to TFN 10.0 DME, turn RIGHT, 030° heading, intercept TFN R-305 inbound to TFN, TFN R-081 to LARYS, turn LEFT, intercept GDV R-039 via SARAY to VASTO. |
| <b>VASTO 5K</b> | <b>12</b> | Climb on LRO R-121 to D16.0 LRO, turn LEFT, along LRO 18.0 DME arc, at LRO R-083 turn RIGHT, intercept TFN R-081 to LARYS, turn LEFT, intercept GDV R-039 via SARAY to VASTO. |

## CONTINGENCY DEPARTURES

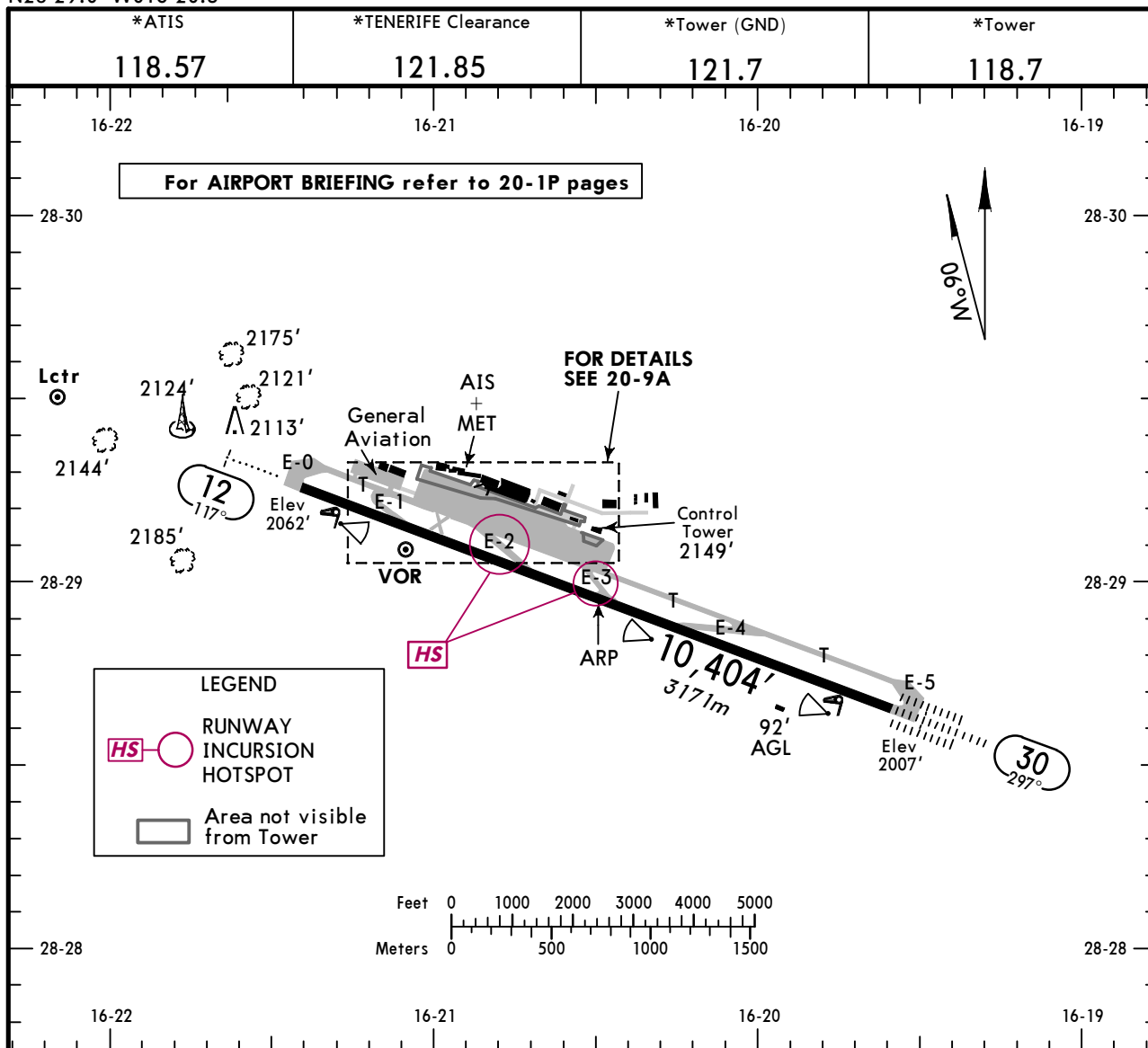
**In case of one or more navaid failure following procedures shall be carried out:**

**Rwy 12:** Climb on runway heading to FL70, turn by following ATC instructions.

This SID requires a minimum climb gradient of 5.3% up to 5500'.

**Rwy 30:** Climb on 302° heading to FL70, turn by following ATC instructions.

This SID requires a minimum climb gradient of 6.8% up to 6500'.



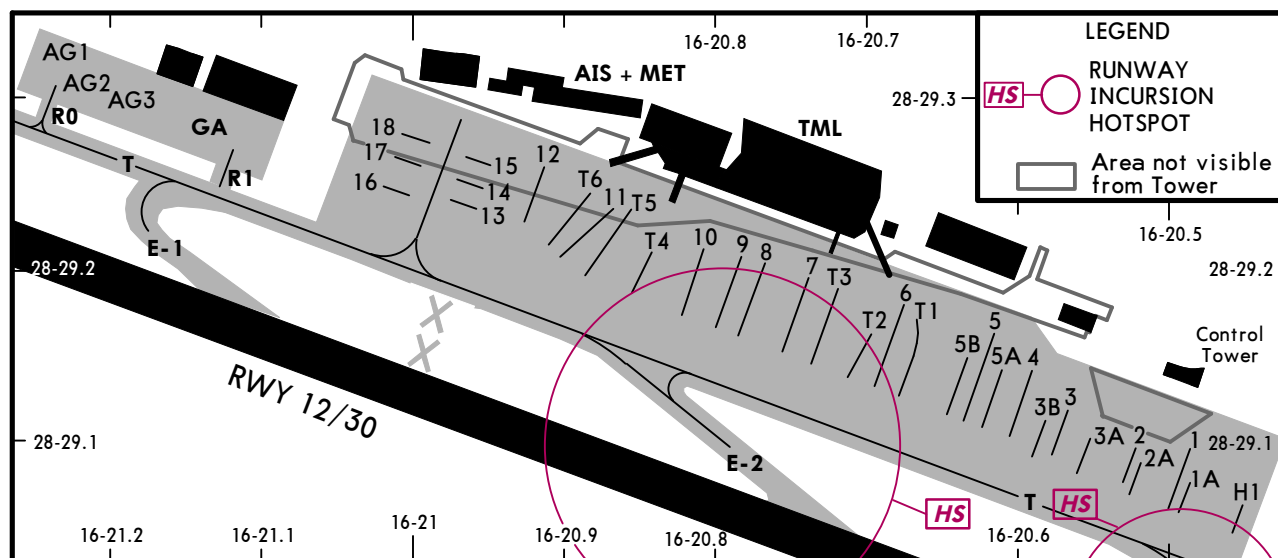
| ADDITIONAL RUNWAY INFORMATION |           |         |          |      |             |                |             |
|-------------------------------|-----------|---------|----------|------|-------------|----------------|-------------|
| RWY                           |           |         |          |      |             | USABLE LENGTHS |             |
|                               |           |         |          |      |             | LANDING BEYOND |             |
|                               |           |         |          |      |             | Threshold      | TAKE-OFF    |
| 12                            | HIRL(50m) | CL(15m) | HIALS    | LDIN | REIL ①      | RVR            | 9432' 2875m |
| 30                            | HIRL(50m) | CL(15m) | HIALS-II | TDZ  | PAPI (3.0°) | RVR            | 9500' 2896m |
|                               |           |         |          |      |             |                |             |
|                               |           |         |          |      |             |                |             |

① PAPI (angle 3.0°)  
② TAKE-OFF RUN AVAILABLE

**RWY 12:**  
From rwy head 10,404' (3171m)  
twy E-1 int 8353' (2546m)

**RWY 30:**  
From rwy head 10,404' (3171m)  
twy E-4 int 6253' (1906m)

| Standard TAKE-OFF ①                                                                            |                                                   |                           |         |                          |                          |
|------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------|---------|--------------------------|--------------------------|
| LVP must be in Force                                                                           |                                                   |                           |         |                          |                          |
|                                                                                                | Approved Operators<br>HIRL, CL<br>& mult. RVR req | RL, CL<br>& mult. RVR req | RL & CL | RCLM (DAY only)<br>or RL | RCLM (DAY only)<br>or RL |
| A                                                                                              |                                                   |                           |         |                          |                          |
| B                                                                                              | 125m                                              | 150m                      | 200m    | 250m                     | 400m                     |
| C                                                                                              |                                                   |                           |         |                          |                          |
| D                                                                                              | 150m                                              | 200m                      | 250m    | 300m                     | 500m                     |
| ① Operators applying U.S. Ops Specs: CL required below 300m; approved HUD required below 150m. |                                                   |                           |         |                          |                          |



## INS COORDINATES

| STAND No.  | COORDINATES        | STAND No.  | COORDINATES        |
|------------|--------------------|------------|--------------------|
| 1 thru 2A  | N28 29.1 W016 20.5 | H1         | N28 29.1 W016 20.5 |
| 3 thru 4   | N28 29.1 W016 20.6 | J1         | N28 29.3 W016 20.9 |
| 5          | N28 29.2 W016 20.6 | L1, L2     | N28 29.3 W016 21.0 |
| 5A, 5B     | N28 29.1 W016 20.6 | T1 thru T3 | N28 29.2 W016 20.7 |
| 6          | N28 29.2 W016 20.7 | T4         | N28 29.2 W016 20.8 |
| 7 thru 10  | N28 29.2 W016 20.8 | T5, T6     | N28 29.2 W016 20.9 |
| 11         | N28 29.2 W016 20.9 |            |                    |
| 12         | N28 29.3 W016 20.9 |            |                    |
| 13         | N28 29.2 W016 21.0 |            |                    |
| 14 thru 18 | N28 29.3 W016 21.0 |            |                    |

## VISUAL DOCKING GUIDANCE SYSTEM

### GENERAL

This system contains information about azimuth guidance (shows the aircraft position with relation to the centerline of the parking area) and distance to the stop position by means, in both cases, of the achieve of images by an optical sensor that sends the sign to a computer in order to process them and to provide the information to the pilot by a display unit, in front of the cockpit.

### DISPLAY UNIT

The display unit to the pilot is designed by 5 LCD modules in 2 sections. As a consequence of the pixel technology, each module allows to show letters, numbers and also symbols. The size of the characters of the display allows the reading from a distance of approximately 328'/100m. If the aircraft is seeded, the situation of the aircraft respect of the docking centerline is indicated by means of the symbol of a plane in the low section of the unit. The lateral diversion with regard to the docking guidance centerline and the remaining distance to the stop point are also presented in a clear and unequivocal way. Beginning from a distance of 98'/30m to the stop point, the remaining distance is shown in an additional way in the top section of the unit. When the blocks are placed, the unit presents in an optional way the message "CHOCK ON" using the special push-button installed in the apron area.

### PILOT INSTRUCTIONS

The following sequence of events identifies how a pilot would use this system to dock an aircraft at this gate.



#### GATE READY FOR DOCKING.

Aircraft type and gate number are alternated in a flashing sequence across the top of display board.



#### AIRCRAFT DETECTED.

When the aircraft is detected, only the aircraft type is displayed steady across the top of the display. At this point, the symbol of a plane is shown across the bottom of the display and the pilot will obtain information about the remaining distance to the stop point as a consequence of passing by fixed distances from stop point as well as azimuth guidance with regard to the centerline:

|                    |            |
|--------------------|------------|
| 98'/30m to 66'/20m | 5m steps   |
| 66'/20m to 33'/10m | 2m steps   |
| 33'/10m to 3'/1m   | 1m steps   |
| 3'/1m to STOP      | 0.2m steps |



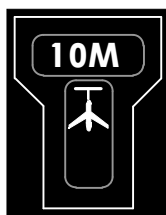
#### AIRCRAFT IS RIGHT OF CENTERLINE.

Correction to the LEFT is required.



#### AIRCRAFT IS LEFT OF CENTERLINE.

Correction to the RIGHT is required.

**VISUAL DOCKING GUIDANCE SYSTEM**

AIRCRAFT IS ON CENTERLINE.  
It is 33'/10m to final stop position.  
Important: Approach slowly to final stop position.



AIRCRAFT IS ON CENTERLINE.  
It is 1.3'/0.4m to final stop position.  
Prepare to stop the aircraft.



STOP.  
Stop now, docking point reached.



OK.  
Successful docking.



TOO FAR.  
Aircraft has gone beyond docking position.



ESTOP (EMERGENCY STOP).  
Stop aircraft immediately,  
wait for docking instructions from  
TWR to resume docking procedure.

If the following events occur, the pilot must stop the docking procedure, report problem to TWR and wait for further instructions:

- Displayed aircraft type is not the incoming aircraft.
- Display board become unreadable (loss of display).
- ESTOP message is displayed.
- Pilot believes system is transmitting erroneous docking data.
- Display board illuminates error messages.

If the system does not detect the aircraft and the pilot does not get a steady aircraft type read out on the top of display until the aircraft nose reached the passengers boarding bridge, pilot should contact TWR and wait for a marshall guidance.

# GCXO/TFN TENERIFE-NORTH, CANARY IS

## ILS or LOC Rwy 12

6 DEC 13 (21-1)

BRIEFING STRIP™

|                             |                                 |                                  |                                      |
|-----------------------------|---------------------------------|----------------------------------|--------------------------------------|
| *ATIS<br>118.57             | *TENERIFE Approach (R)<br>124.8 | *TENERIFE Tower<br>118.7         | *Ground<br>121.7                     |
| LOC<br>INOR<br>108.7        | Final<br>Apch Crs<br>117°       | GS<br>D4.0 INOR<br>3402' (1342') | ILS<br>DA(H)<br>Refer to<br>Minimums |
| Apt Elev 2077'<br>RWY 2062' |                                 |                                  |                                      |

MISSED APCH: Climb on 117° from Lctr to 6000', then turn LEFT direct to VOR and join holding.

114° → 6500'  
14,500' ← 328°

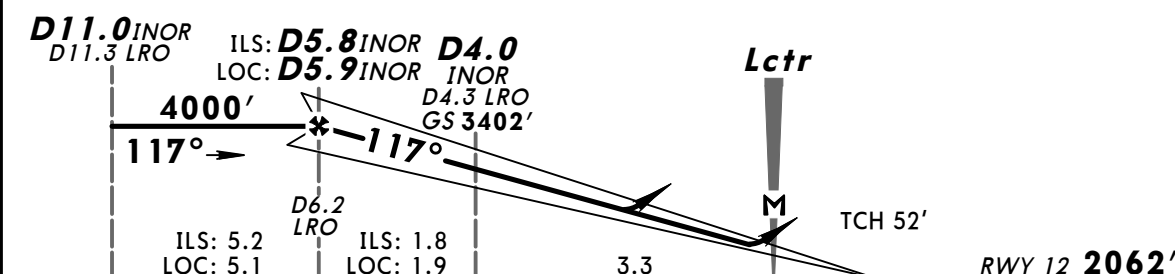
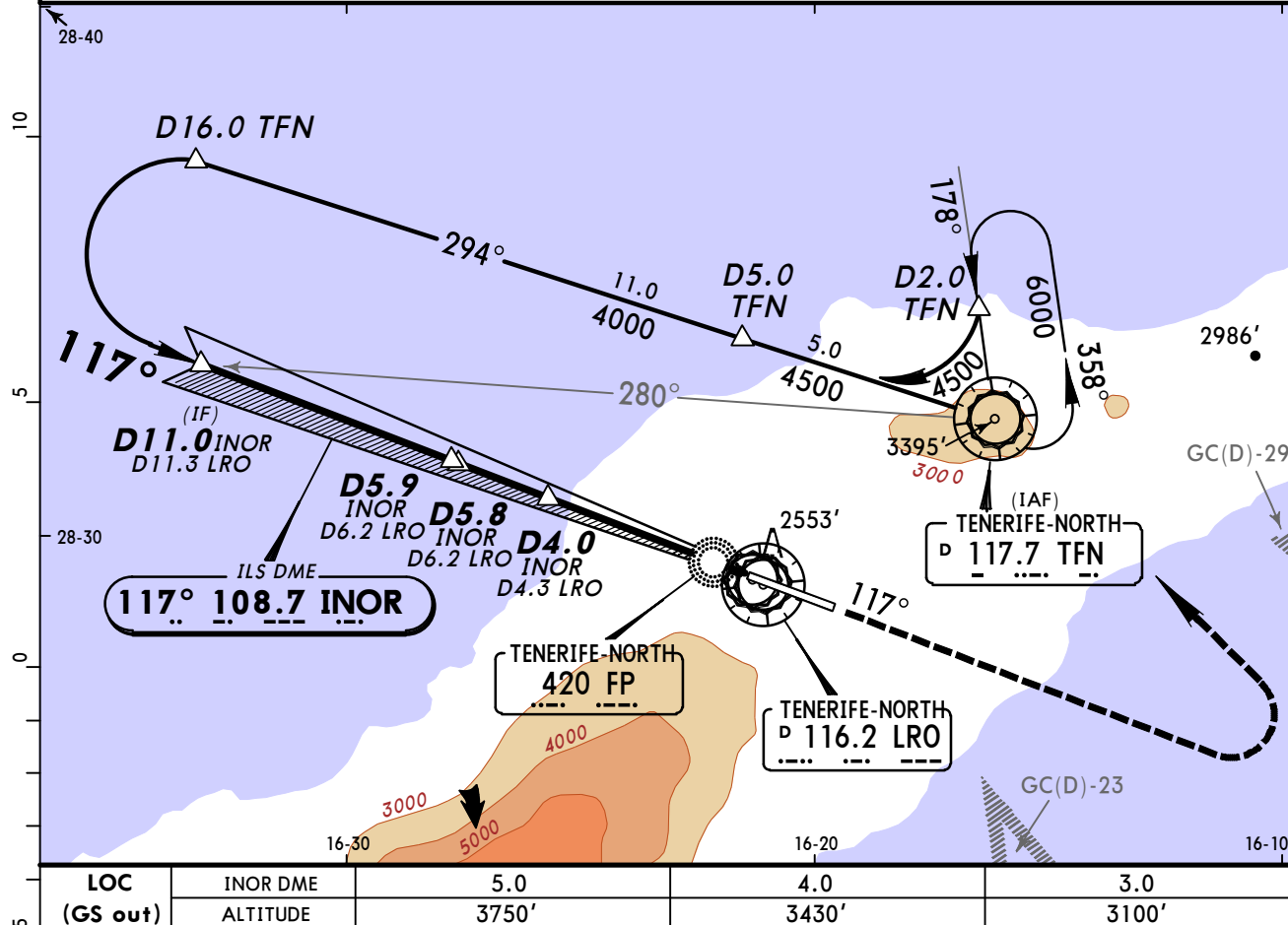
MSA TFN VOR

**MISSED APCH:** Climb on 117° from Lctr to 6000', then turn LEFT direct to VOR and join holding.

MSA TFN VOR

Alt Set: hPa Rwy Elev: 73 hPa Trans level: By ATC Trans alt: 6000'

1. VOR, DME and ADF required. 2. CAUTION: Possible false GP or LOC indications outside coverage area. 3. ILS DME reads zero at rwy 12 threshold. 4. ILS: No obstacle free zone rwy 12.



| Gnd speed-Kts     | 70    | 90  | 100 | 120 | 140 | 160 |
|-------------------|-------|-----|-----|-----|-----|-----|
| ILS GS            | 377   | 485 | 539 | 647 | 755 | 862 |
| LOC Descent Angle | 3.10° | 384 | 494 | 548 | 658 | 768 |
| MAP at Lctr       |       |     |     |     |     |     |

|       |       |      |
|-------|-------|------|
| HIALS | 6000' | 117° |
| REIL  | ↑     | on   |
| PAPI  |       | from |
|       |       | FP   |
|       |       | 420  |

| STRAIGHT-IN LANDING RWY 12 |  |                 |  | CIRCLE-TO-LAND          |                     |
|----------------------------|--|-----------------|--|-------------------------|---------------------|
| Standard                   |  | ILS             |  | Prohibited South of rwy |                     |
| DA(H)                      |  | LOC (GS out)    |  |                         |                     |
| A: 2352' (290')            |  | C: 2372' (310') |  |                         |                     |
| B: 2362' (300')            |  | D: 2382' (320') |  |                         |                     |
| FULL/Limited               |  | ALS out         |  |                         |                     |
| A                          |  | RVR 1500m       |  | Max Kts                 | MDA(H) VIS          |
| B                          |  |                 |  | 100                     | 3020' (943') 1500m  |
| C                          |  |                 |  | 135                     | 3020' (943') 1600m  |
| D                          |  |                 |  | 180                     | 3750' (1673') 2400m |
|                            |  |                 |  | 205                     | 3850' (1773') 3600m |



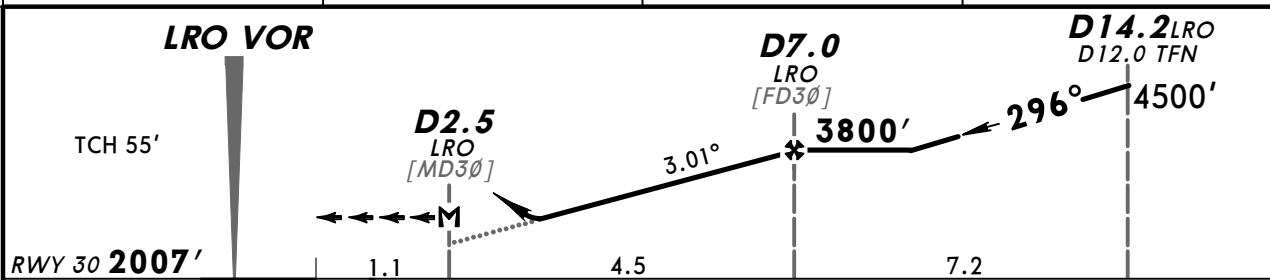
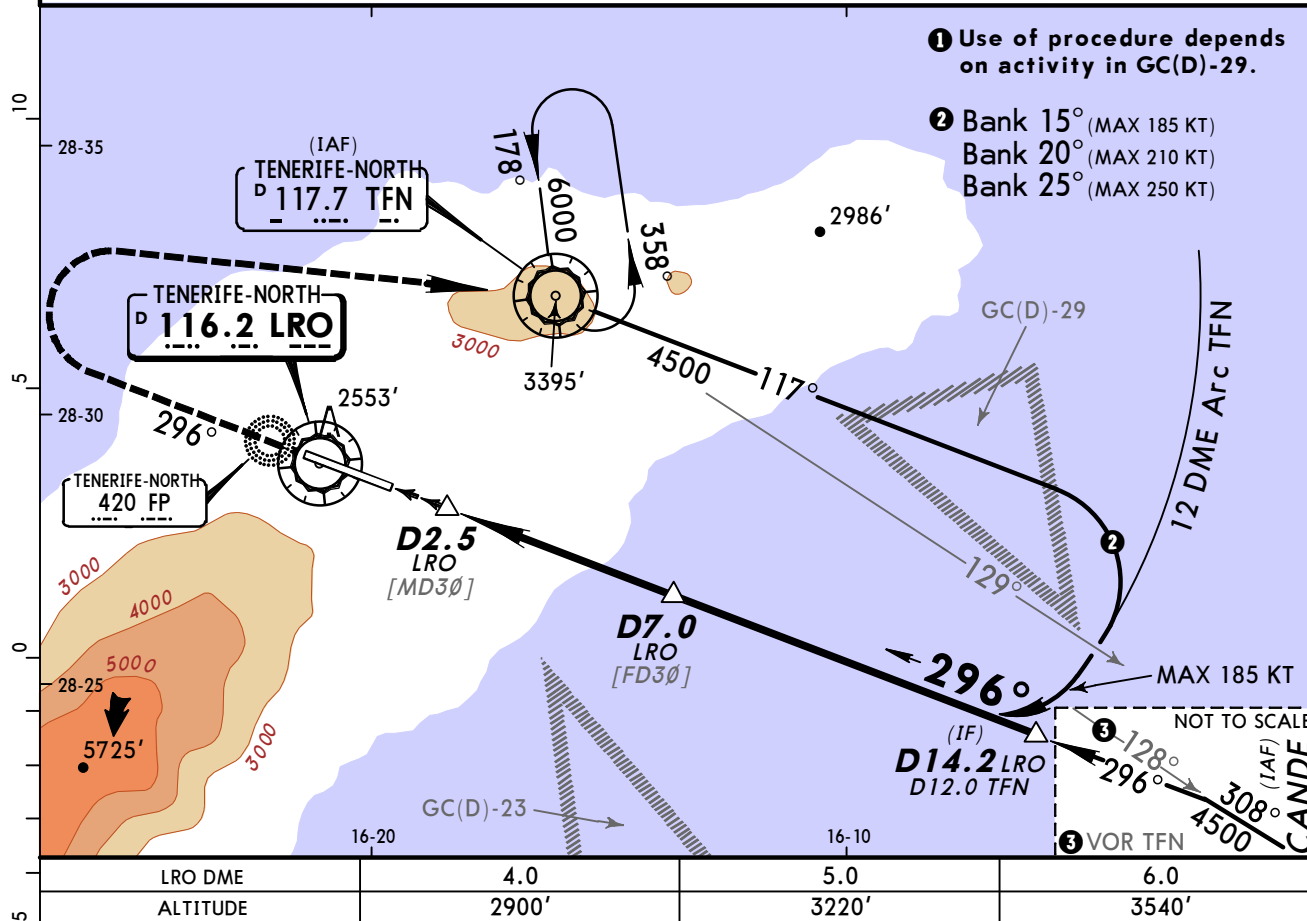
BRIEFING STRIP™

|                                                                                          |  |                                 |  |                                          |  |                       |  |                            |  |
|------------------------------------------------------------------------------------------|--|---------------------------------|--|------------------------------------------|--|-----------------------|--|----------------------------|--|
| *ATIS<br>118.57                                                                          |  | *TENERIFE Approach (R)<br>124.8 |  | *TENERIFE Tower<br>118.7                 |  | *Ground<br>121.7      |  |                            |  |
| VOR<br>LRO<br>116.2                                                                      |  | Final<br>Apch Crs<br>296°       |  | Minimum Alt<br>D7.0 LRO<br>3800' (1793') |  | DA(H)<br>2750' (743') |  | Apt Elev 2077'<br>RWY2007' |  |
| MISSED APCH: Climb via LRO VOR on R-296 LRO to 4500', then turn RIGHT direct to TFN VOR. |  |                                 |  |                                          |  |                       |  |                            |  |

MSA  
TFN VOR

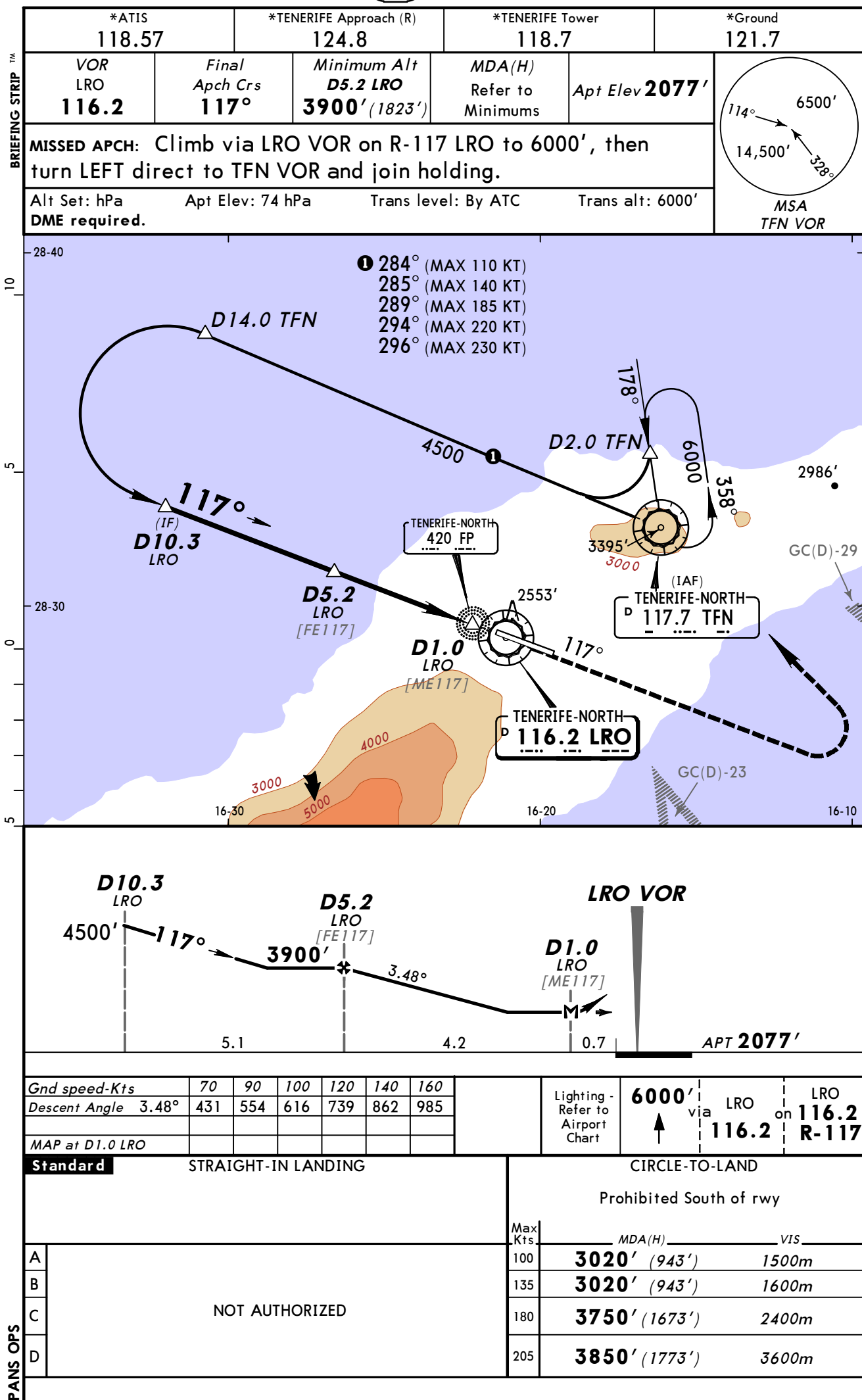
Alt Set: hPa      Rwy Elev: 71 hPa      Trans level: By ATC      Trans alt: 6000'

1. DME required.      2. Final approach track offset 1° from rwy centerline.



|                     |     |     |     |     |     |     |  |
|---------------------|-----|-----|-----|-----|-----|-----|--|
| Gnd speed-Kts       | 70  | 90  | 100 | 120 | 140 | 160 |  |
| Descent Angle 3.01° | 373 | 479 | 532 | 639 | 745 | 852 |  |
| MAP at D2.5 LRO     |     |     |     |     |     |     |  |

| STRAIGHT-IN LANDING RWY 30 |           | CIRCLE-TO-LAND          |                     |
|----------------------------|-----------|-------------------------|---------------------|
| DA(H) <b>2750'</b> (743')  |           | Prohibited South of rwy |                     |
| ALS out                    |           | Max Kts                 | MDA(H) VIS          |
| A                          | RVR 1500m | 100                     | 3020' (943') 1500m  |
| B                          |           | 135                     | 3020' (943') 1600m  |
| C                          | CMV 2400m | 180                     | 3750' (1673') 2400m |
| D                          |           | 205                     | 3850' (1773') 3600m |



**Chart changes since cycle 26-2013**

ADD = added chart, REV = revised chart, DEL = deleted chart.

| ACT                                            | PROCEDURE IDENT              | INDEX | REV DATE    | EFF DATE |
|------------------------------------------------|------------------------------|-------|-------------|----------|
| <b>TENERIFE-NORTH, (TENERIFE-NORTH - GCXO)</b> |                              |       |             |          |
| REV                                            | AIRPORT, AIRPORT INFO, TA... | 20-9  | 06 Dec 2013 |          |
| REV                                            | PARKING STANDS AND COORDS    | 20-9A | 06 Dec 2013 |          |
| REV                                            | ILS OR LOC RWY 12            | 21-1  | 06 Dec 2013 |          |
| REV                                            | ILS OR LOC RWY 30            | 21-2  | 06 Dec 2013 |          |
| REV                                            | VOR RWY 30                   | 23-1  | 06 Dec 2013 |          |
| REV                                            | VOR                          | 23-2  | 06 Dec 2013 |          |

## TERMINAL CHART CHANGE NOTICES

### Chart Change Notices for Airport GCXO

**Type:** Terminal

**Effectivity:** Permanent

**Begin Date:** 20130919

**End Date:** No end date

(21-2) Procedure designation changed to "ILS or LOC Rwy 30". (23-2) Procedure designation changed to "VOR".

**Type:** Terminal

**Effectivity:** Permanent

**Begin Date:** 20130822

**End Date:** No end date

Clearance frequency, c/s TENERIFE Tower, 121.85 MHz, PTO, established.