

List of pages in this Trip Kit

Trip Kit Index

Airport Information For KCLT

Terminal Charts For KCLT

Revision Letter For Cycle 01-2015

Change Notices

Notebook

General Information

Location: Charlotte NC USA
IATA Code: CLT
Lat/Long: N35° 12.8' W080° 56.9'
Elevation: 748 ft

Airport Use: Public
Magnetic Variation: 7.6°W
Sectional Chart: Charlotte

Fuel Types: 100 Octane (LL), Jet A, Jet A+
Oxygen Types: High Pressure, Low Pressure
Repair Types: Major Airframe, Major Engine
Customs: Upon Prior Request
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: Yes
Beacon: Yes

Sunrise: 1233 Z
Sunset: 2226 Z,

Runway Information

Runway: 05
Length x Width: 7502 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 716 ft
Lighting: Edge, ALS, Centerline

Runway: 18C
Length x Width: 10000 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 742 ft
Lighting: Edge, ALS, Centerline

Runway: 18L
Length x Width: 8676 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 748 ft
Lighting: Edge, Centerline, REIL

Runway: 18R
Length x Width: 9000 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 744 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 23
Length x Width: 7502 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 747 ft
Lighting: Edge, Centerline, REIL

Runway: 36C
Length x Width: 10000 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 707 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 36L
Length x Width: 9000 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 744 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 36R
Length x Width: 8676 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 727 ft
Lighting: Edge, ALS, Centerline, TDZ

Communication Information

ATIS 132.1 Departure Service
ATIS 121.15 Arrival Service
Charlotte Tower 133.35
Charlotte Tower 118.1
Charlotte Tower 126.4
Charlotte Ground Control 121.9 (360°-179°)
Charlotte Ground Control 121.8 (180°-359°)
Charlotte Ramp/Taxi Control 131.6
Charlotte Ramp/Taxi Control 129.8
Charlotte Clearance Delivery 127.15
Charlotte Approach Control 134.75 (246°-360°) At or below 8000 ft Initial Contact
Charlotte Approach Control 128.325 (1°-119°) At or below 8000 ft
Charlotte Approach Control 124.0 (75°-245°) At or above 8001 ft
Charlotte Approach Control 120.5 (246°-74°) At or above 8001 ft
Charlotte Approach Control 120.05 (120°-245°) At or below 8000 ft
Charlotte App TCA 134.75 (246°-360°) At or below 8000 ft
Charlotte App TCA 128.325 (1°-119°) At or below 8000 ft
Charlotte App TCA 124.0 (75°-245°) At or above 8001 ft
Charlotte App TCA 120.5 (246°-74°) At or above 8001 ft
Charlotte App TCA 120.05 (120°-245°) At or below 8000 ft
Charlotte Departure Control 134.75 (246°-360°) At or below 8000 ft
Charlotte Departure Control 128.325 (1°-119°) At or below 8000 ft
Charlotte Departure Control 124.0 (75°-245°) At or above 8001 ft
Charlotte Departure Control 120.5 (246°-74°) At or above 8001 ft
Charlotte Departure Control 120.05 (120°-245°) At or below 8000 ft
Charlotte/Douglas Intl Unicom 122.95

Raleigh Flight Service Station 122.4 RCO

CHARLOTTE CLASS B AIRSPACE

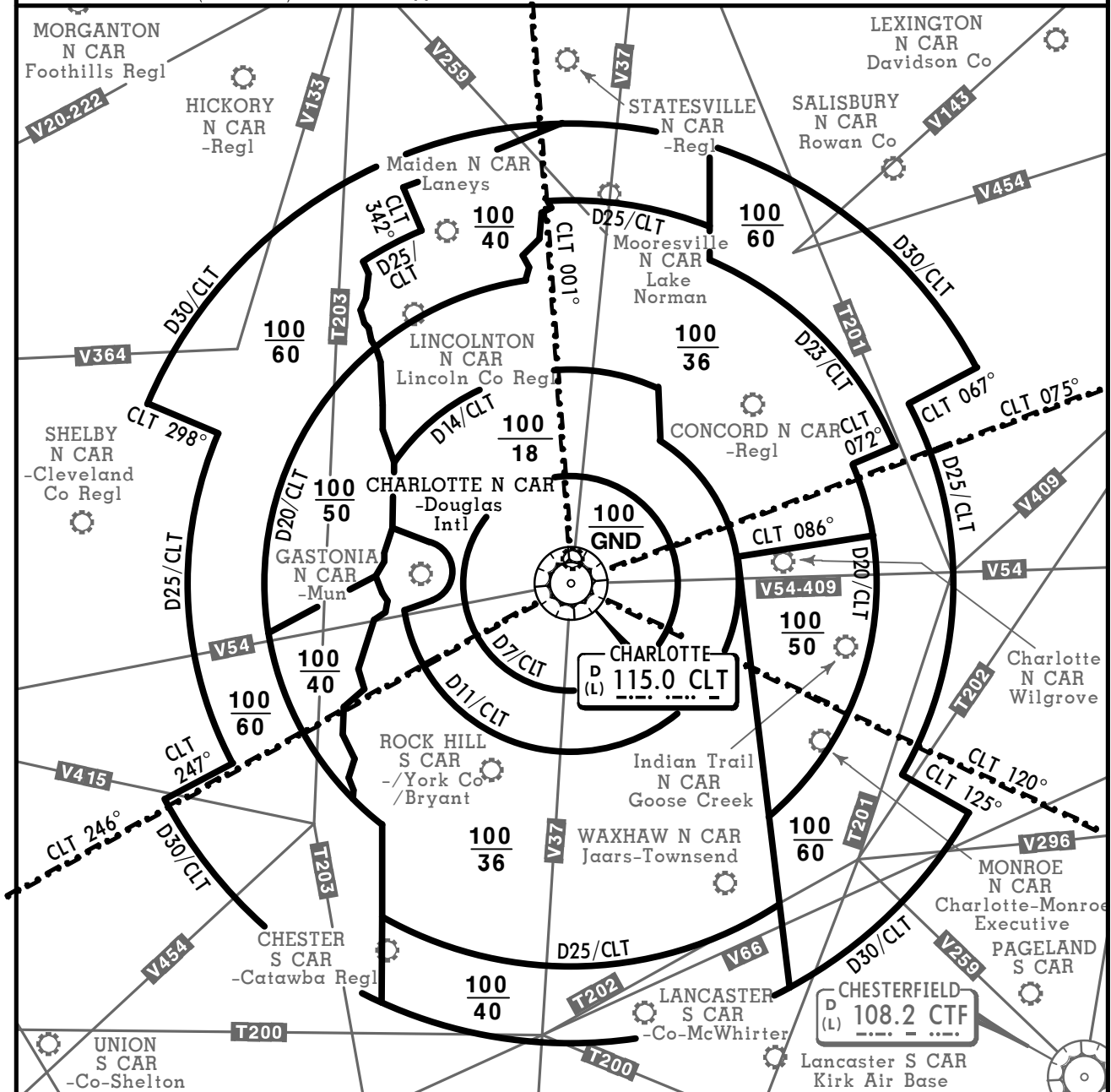
CLASS B AIRSPACE VFR COMMUNICATIONS

8000' & BELOW

ABOVE 8000'

(001°-119°)	Charlotte App	128.32
(120°-245°)	Charlotte App	120.05
(246°-360°)	Charlotte App	134.75

(075°-245°)	Charlotte App	124.0
(246°-074°)	Charlotte App	120.5



FOR OPERATING RULES AND PILOT AND EQUIPMENT REQUIREMENTS
SEE FAR 91.131, 91.117 AND 91.215

FLIGHT PROCEDURES

IFR Flights-Aircraft within the Class B airspace are required to operate in accordance with current IFR procedures.

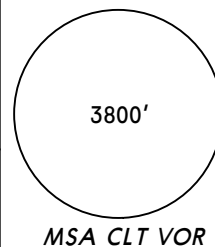
VFR Flights-

- a. Arriving aircraft should contact Charlotte Approach Control on the specified frequencies. Although arriving aircraft may be operating beneath the floor of the Class B airspace on initial contact, communications should be established with Approach Control for sequencing and spacing purposes.
- b. Aircraft departing the primary airport are requested to advise clearance delivery prior to taxiing of their intended altitude and direction of flight to depart the Class B airspace. Aircraft departing from other than Charlotte-Douglas International Airport whose route of flight would penetrate the Class B airspace should give this information to ATC on appropriate frequencies.
- c. Aircraft desiring to transit the Class B airspace may obtain an ATC clearance and will be handled on an equitable "First-come, first-served" basis, provided the requirements of FAR 91 are met.

D-ATIS
Arrival
121.15

Apt Elev
748'

Alt Set: INCHES
Trans level: FL180 Trans alt: 18000'
1. DME/DME/IRU or GPS required. 2. RNAV 1.
3. This STAR applicable to Turbojet aircraft only.
4. RADAR required.



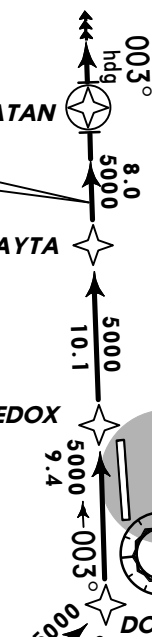
ADENA THREE RNAV ARRIVAL (ADENA.ADEN3)

Direct distance from CATAN to:
Charlotte/Douglas Intl 22 NM
Direct distance from LOCKS to:
Charlotte/Douglas Intl 24 NM



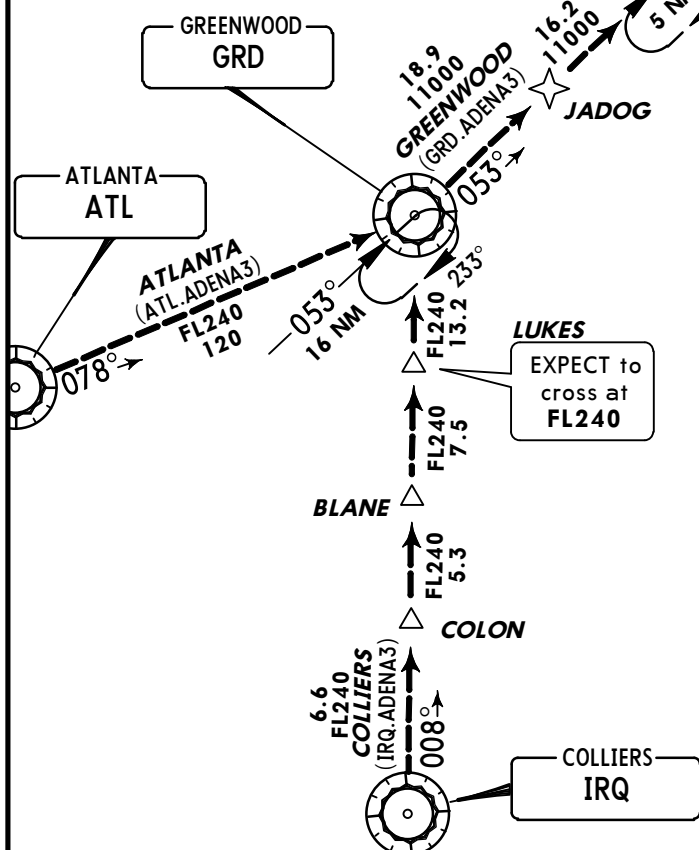
LANDING SOUTH
EXPECT RADAR vectors
to final approach course
prior to CATAN

ADENA
LANDING NORTH
EXPECT to cross at
250 KT and 11000'
LANDING SOUTH
EXPECT to cross at
250 KT and 12000'



CHARLOTTE
CLT

LANDING NORTH
EXPECT RADAR vectors
to final approach course
prior to LOCKS



COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼
LANDING NORTH: At LOCKS fly heading 090°, **MAINTAIN 5000'**. Intercept and execute ILS or LOC RWY 36L approach. If unable, proceed direct to CLT and hold, **MAINTAIN 5000'**.
LANDING SOUTH: At CATAN fly heading 090°, **MAINTAIN 5000'**. Intercept and execute ILS or LOC RWY 18R approach. If unable, proceed direct to CLT and hold, **MAINTAIN 5000'**.
LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲

ROUTING

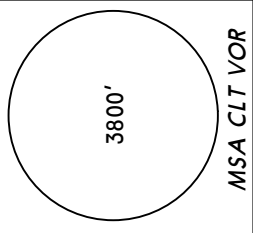
From ADENA on track 054° to LOCKS, then as depicted to CATAN. Depart CATAN heading 003° for vectors to final approach course.

CHARLOTTE/
DOUGLAS
INTL
D-ATIS
Arrival
121.15

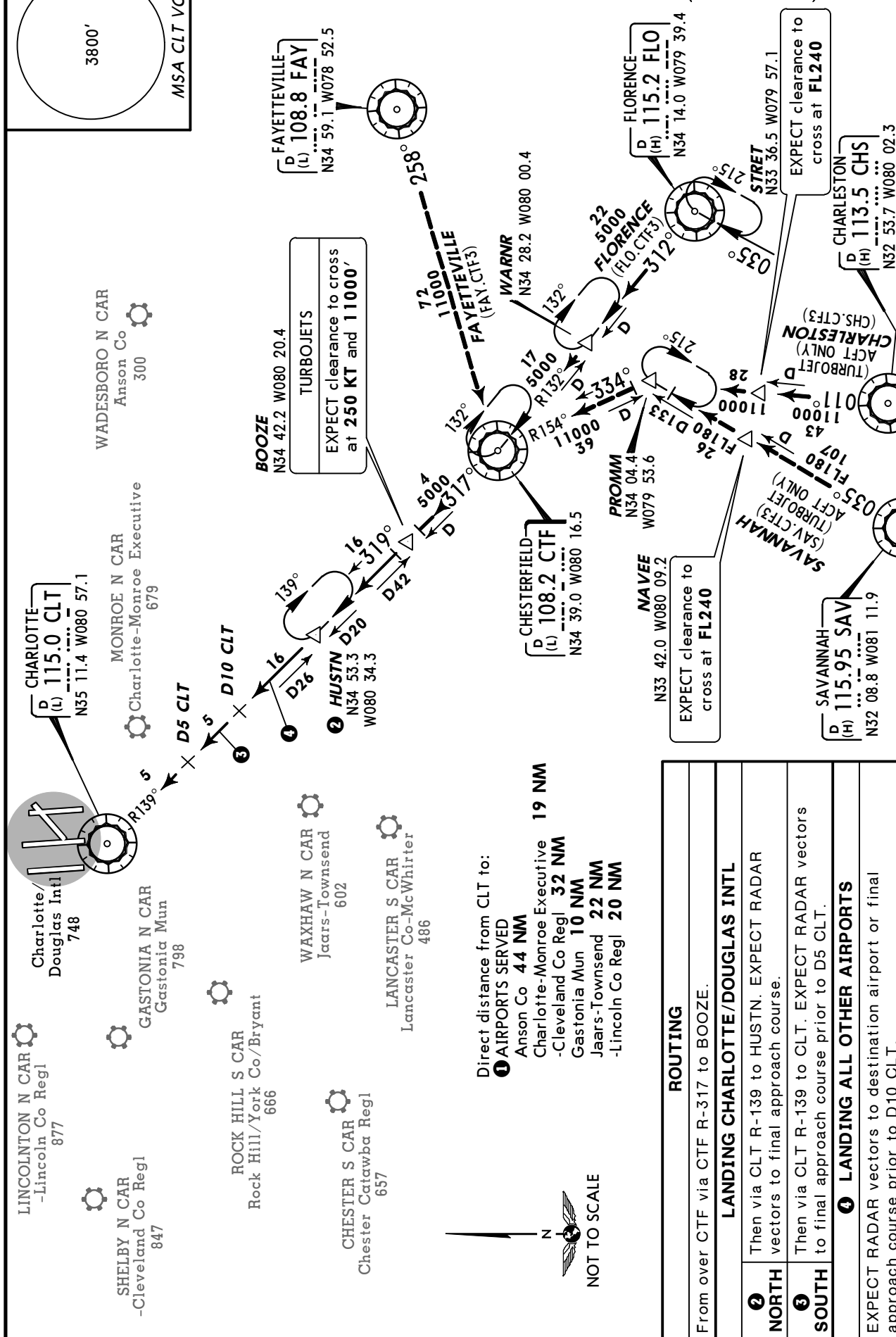
Apt Elev
See Graphic

Alt Set: INCHES Trans level: FL180 Trans alt: 18000'

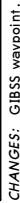
1. DME required.
2. CHARLESTON and SAVANNAH transitions for Turbojet aircraft only.
3. Also serves ①



CHESTERFIELD THREE ARRIVAL (CTF.CTF3)



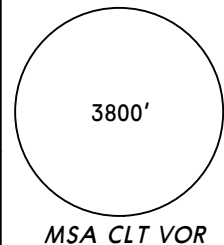
MSA CLT VOR



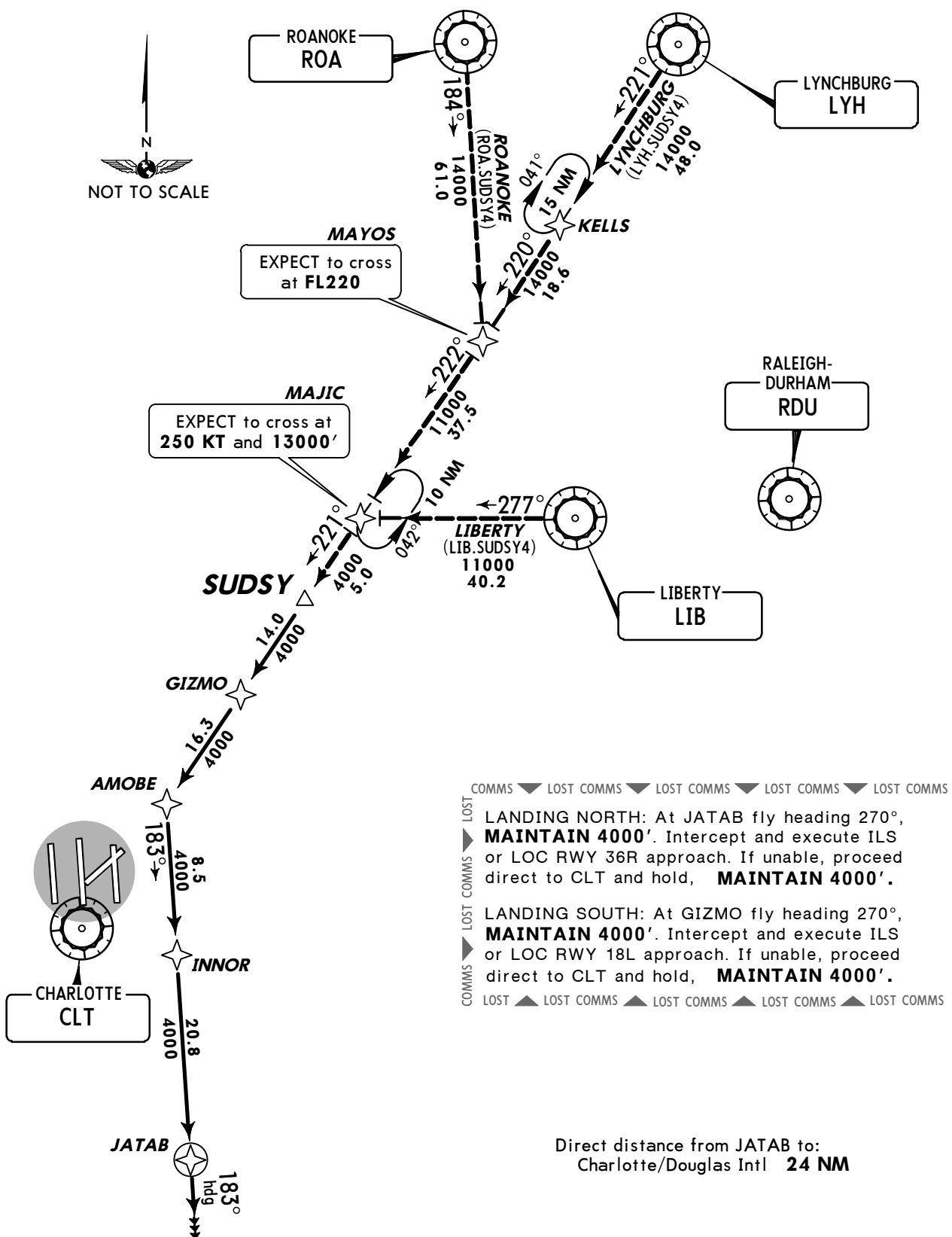
D-ATIS
Arrival
121.15

Apt Elev
748'

Alt Set: INCHES
Trans level: FL180 Trans alt: 18000'
1. DME/DME/IRU or GPS required. 2. RNAV 1.
3. RADAR required.
4. This STAR applicable to turbojet aircraft only.

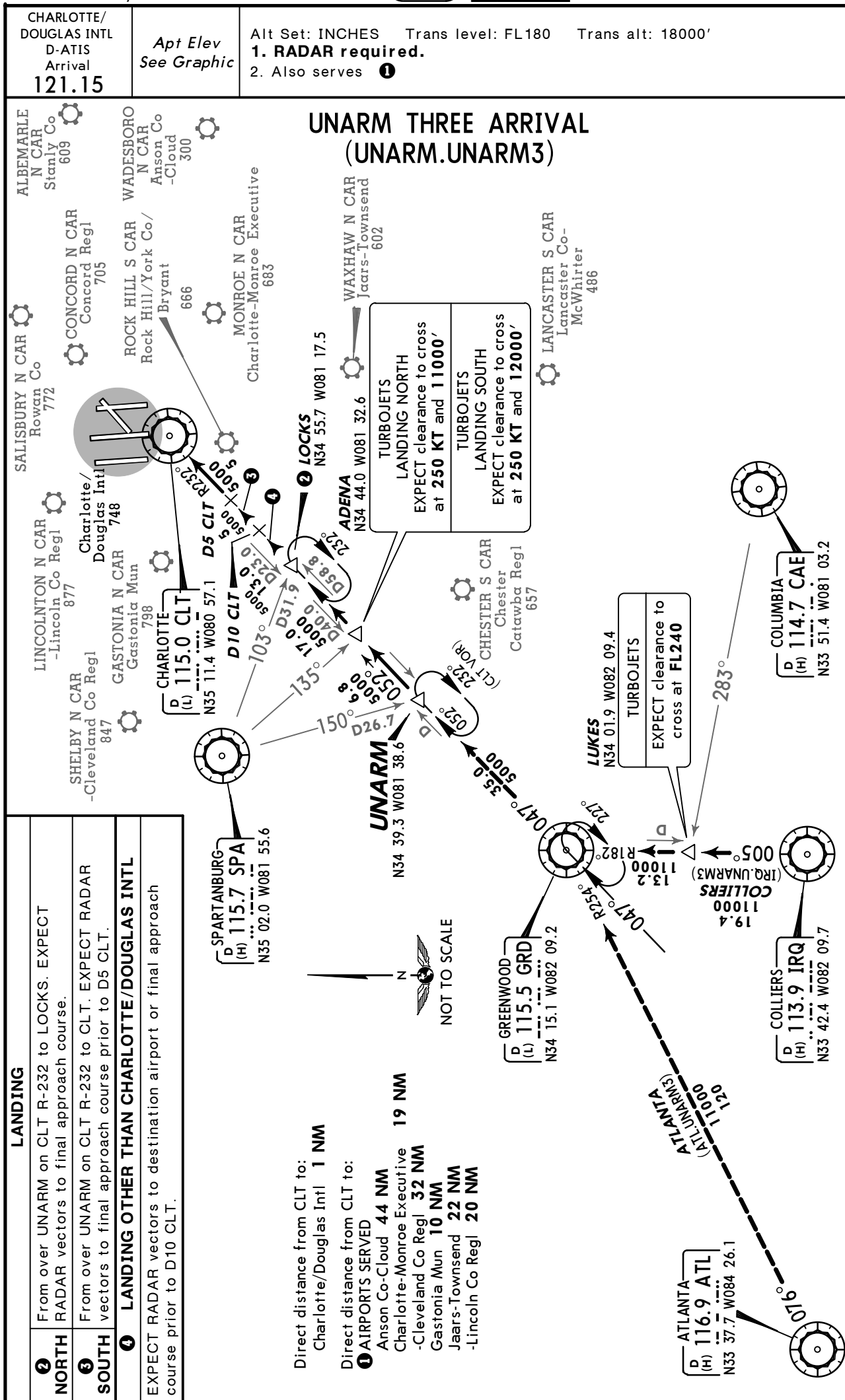


SUDSY FOUR RNAV ARRIVAL (SUDSY.SUDSY4)



ROUTING

From SUDSY on track 221° to GIZMO, then as depicted to JATAB. Depart JATAB heading 183° for vectors to final approach course.



CLT RNAV SID ADVISORY NOTICE**Flight Crew Procedures for Simultaneous RNAV SIDs off Parallel Runways**

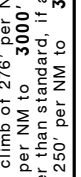
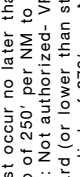
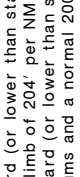
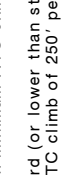
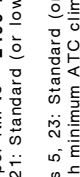
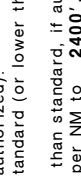
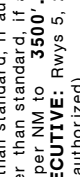
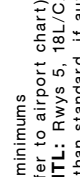
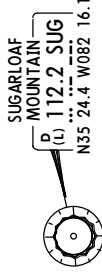
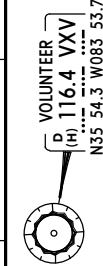
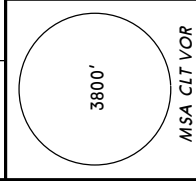
1. **PREFLIGHT:** All aircraft capable of conducting terminal RNAV procedures should expect an RNAV SID clearance. If unable to accept the RNAV SID clearance, notify Clearance Delivery. Upon receipt of your Air Traffic Control (ATC) clearance, crosscheck the assigned RNAV SID, Departure Runway, and Enroute Transition, as loaded into and depicted by your navigation system, against your clearance. Ensure that the sequencing of waypoints loaded in the FMS matches the waypoints on the appropriate chart(s). Do not modify or manually construct RNAV procedures. *Ensure all transitions are loaded correctly.*
2. **BEFORE TAKEOFF:** Ensure that the Departure Runway assigned on Taxi, RNAV SID, and Enroute Transition are depicted by your navigation system. Pay particular attention if you have received a runway change or a revised ATC clearance. Pilots of aircraft equipped with electronic navigation map displays must verify that the aircraft symbol relative to the runway symbol and lateral track and depicted route agrees with your clearance. You should ensure the waypoints sequence depicted by your navigation system matches the route depicted on the appropriate chart(s). For navigation systems with ROUTE and LEGS pages, the LEGS page should be used to verify routing. *If unable to comply with the RNAV SID, contact ATC prior to takeoff and request an amended clearance.*
3. **LINE-UP/TAKEOFF:** Pilots can expect a takeoff clearance from ATC that will provide instructions to depart the runway either via an RNAV path or via an assigned heading to be maintained. An RNAV path takeoff clearance will direct aircraft to fly the required RNAV path to the initial waypoint on the SID in the ATC clearance. A typical takeoff clearance will state, for example, *“Cactus 123, RNAV to GIRGY, Runway 18C; Cleared for takeoff.”* After verifying that the correct runway and departure are loaded and that the correct lateral navigation mode is available and ready for use after takeoff, the expected verbatim pilot response is *“Cactus 123, RNAV to GIRGY, Runway 18C; Cleared for takeoff.”* **DO NOT TRUNCATE THE REPLY.** The verbatim response must include *“RNAV to GIRGY.”* If the takeoff clearance does not match the planned/loaded procedure, either request an initial heading from tower or refuse the takeoff clearance until the discrepancy is resolved.
4. **AFTER TAKEOFF:** Unless instructed to fly a heading by the Tower, engage lateral navigation flight guidance as soon as practical and fly the departure precisely. Strict compliance with the lateral and vertical tracks and charted speed restrictions is imperative. Parallel RNAV departures must not encroach on the airspace between extended parallel runway centerlines without specific ATC clearance. Manually intervene if necessary to stay on track to avoid transgressing in the direction of a parallel track. *If unable to comply with the SID profile, either laterally or vertically, immediately notify ATC.*

KCLT/CLT
CHARLOTTE/DOUGLAS INTL

1. **RADAR and DME required.**
2. For turbojets only.
3. Also serves 1.
4. -LINCOLN CO REGL, ROWAN CO, STANLY CO only
If unable to accept climb rate, advise ATC on initial contact.

Apt Elev
See
Graphic
Trans level: FL180
Trans alt: 18000'

CHARLOTTE
Departure (R)
120.5



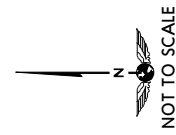
AIRPORT	INITIAL CLIMB	ALTITUDE
CHARLOTTE/ DOUGLAS INTL	Rwy 5: Climb heading 055° Rwy 18L: Climb heading 183° Rwy 18C: Climb heading 183° until passing D1.6 CLT, then turn RIGHT heading 200° Rwy 18R: Climbing RIGHT turn heading 200° Rwy 23L: Climb heading 235° Rwy 36L: Climbing LEFT turn heading 315° Rwy 36C: Climbing LEFT turn heading 330° Rwy 36R: Climbing RIGHT turn heading 025°	MAINTAIN 8000'
	Rwy 5: Climb heading 053° Rwy 23: Climb heading 233°	MAINTAIN 3000'
	Rwy 2: Climb heading 016° Rwy 20: Climbing LEFT turn heading 150°	MAINTAIN 3400'
	Rwy 3: Climb heading 034° Rwy 21: Climb heading 214°	MAINTAIN 3000'
	Rwy 5: Climb heading 063° to 2000' before proceeding on course. Rwy 23: Climb heading 233° to 2800' before turning LEFT.	MAINTAIN 3000'
	Rwy 2: Climb heading 022° Rwy 20: Climb heading 160° to 1500' before turning WEST. Rwy 4R: Climb heading 043° Rwy 22L: Climb heading 223°	MAINTAIN 3000'
ROUTING		
EXPECT RADAR vectors to intercept filed/assigned transition or enroute fix/navaid. EXPECT filed altitude/flight level 10 minutes after departure.		

This SID requires take-off minimums (for standard minimums, refer to airport chart):
CHARLOTTE/DOUGLAS INTL: Rwys 5, 18L/C/R, 23, 36C/R: Standard (or lower than standard, if authorized).
Rwy 36L: Standard (or lower than standard, if authorized) with minimum climb of 215' per NM to **3500'**.
CHARLOTTE-MONROE EXECUTIVE: Rwys 5, 23: Standard (or lower than standard, if authorized).
CONCORD REGL: Rwy 2: Standard (or lower than standard, if authorized).
Rwy 20: Standard (or lower than standard, if authorized) with minimum climb of 318' per NM to **2400'**.
GASTONIA MUN: Rwys 3, 21: Standard (or lower than standard, if authorized).
-LINCOLN CO REGL: Rwys 5, 23: Standard (or lower than standard, if authorized) with minimum ATC climb of 250' per NM to **3000'**.
ROWAN CO: Rwy 2: Standard (or lower than standard, if authorized) with minimum ATC climb of 250' per NM to **3000'**.
Rwy 20: 400-2 ¾ or standard (or lower than standard, if authorized) with minimum climb of 204' per NM to **1300'**, or alternatively, with standard (or lower than standard, if authorized) take-off minimums and a normal 200' per NM climb gradient, take-off must occur no later than 1300' prior to DER. Minimum ATC climb of 250' per NM to **3000'**.
STANLY CO: Rwys 4L, 22R: Not authorized- VFR runway.
Rwy 4R: 300-1 ½ or standard (or lower than standard, if authorized) with minimum climb of 276' per NM to **1000'**. Minimum ATC climb of 250' per NM to **3000'**.
Rwy 22L: Standard (or lower than standard, if authorized) with minimum ATC climb of 250' per NM to **3000'**.

OBSTACLES
For TAKEOFF OBSTACLE NOTES see 10-30B1.

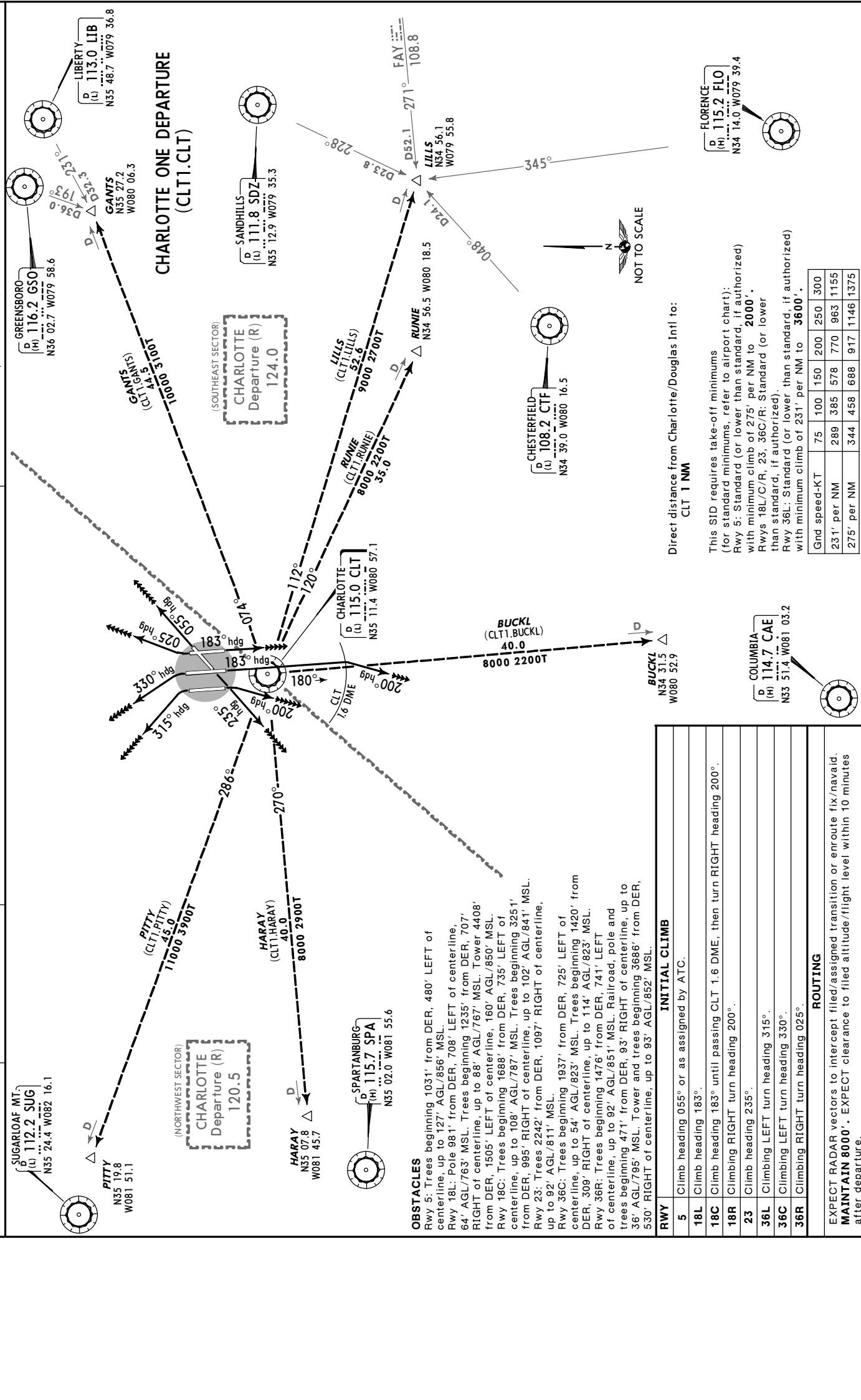
Gnd speed-KT	75	100	150	200	250	300
204' per NM	255	340	510	680	850	1020
215' per NM	269	358	538	717	896	1075
250' per NM	313	417	625	833	1042	1250
276' per NM	345	460	690	920	1150	1380
318' per NM	398	530	795	1060	1325	1590

Direct distance to CLT from:
Charlotte/Douglas Intl 1 NM
Direct distance to CLT from:
1 AIRPORTS SERVED
Charlotte-Monroe Executive 19 NM
Concord Regl 17 NM
Gastonia Mun 10 NM
-Lincoln Co Regl 20 NM
Rowan Co 35 NM
Stanly Co 42 NM



Apt Elev

FOR DEPARTURE
CONTROL FREQ.
SEE GRAPHIC



RWY	INITIAL CLIMB
5	Climb heading 055° or as assigned by ATC.
18L	Climb heading 183°.
18C	Climb heading 183° until passing CLT 1.6 DME, then turn RIGHT heading 200°.
18R	Climbing RIGHT turn heading 200°.
23	Climb heading 235°.
36L	Climbing LEFT turn heading 315°.
36C	Climbing LEFT turn heading 330°.
36R	Climbing RIGHT turn heading 025°.

EXPECT RADAR vectors to intercept filed/assigned transition or enroute fix/naavid.
MAINTAIN 8000'. EXPECT clearance to filed altitude/flight level within 10 minutes after departure.

1. RNAV 1.
2. DME/DME/IRU or GPS required.
3. RADAR required.
4. For turbojets only.

5. If unable to accept climb rates, advise ATC on initial contact.
6. Transponder code will be issued via PDC or Charlotte clearance delivery
7. Accelerate to 250 KT, if unable, advise ATC.

MSA CLT VOR

Rwy 5: Trees beginning 1031' from DER, 480' LEFT of centerline, up to 127' AGL/856' MSL.

Rwy 18L: Tower and pole beginning 981' from DER, 708' LEFT of centerline, up to 160' AGL/850' MSL.

Trees beginning 1235' from DER, 707' RIGHT of centerline, up to 88' AGL/767' MSL.

Rwy 18C: Trees beginning 1688' from DER, 735' LEFT of centerline, up to 108' AGL/787' MSL. Trees beginning 3251' from DER, 995' RIGHT of centerline, up to 102' AGL/841' MSL.

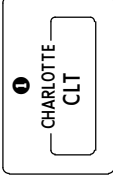
Rwy 23: Trees beginning 3899' from DER, 216' LEFT of centerline, up to 99' AGL/818' MSL. Trees beginning 1491' from DER, 603' RIGHT of centerline, up to 74' AGL/823' MSL.

Rwy 36C: Trees beginning 1937' from DER, 725' LEFT of centerline, up to 54' AGL/823' MSL. Trees beginning 1420' from DER, 309' RIGHT of centerline, up to 114' AGL/823' MSL.

Rwy 36R: Pole and trees beginning 713' from DER, 416' LEFT of centerline, up to 94' AGL/853' MSL. Railroad antenna, poles and trees beginning 471' from DER, 93' RIGHT of centerline, up to 93' AGL/852' MSL.

(Rwy 5) to: VEAZY 4 NM
(Rwy 18L) to: HISOR 4 NM
(Rwy 18C) to: GIRGY 3 NM
(Rwy 18R) to: WEKIN 6 NM
(Rwy 23) to: UNCOT 3 NM
(Rwy 36L) to: JIMAL 7 NM
(Rwy 36C) to: EBAWI 6 NM
(Rwy 36R) to: KAYFO 6 NM

**SPEED: DO NOT EXCEED 280 KTS
UNTIL ADVISED BY ATC**



DEBTE

(DELETED, B.G.R.D.)
0000 31001
113

BGRED

This SID requires take-off minimums (for standard minimums, refer to airport chart): Rwy 5, 18L/C/R, 23, 36L/C/R: Standard (or lower than standard, if authorized) with minimum climb of 500' per NM to **1260'**.

Gnd speed-KT	75	100	150	200	250	300
500' per NM	625	833	1250	1667	2083	2500

RWY	INITIAL CLIMB	ALTITUDE
5	Climb heading 055° to 1260' , then direct VEAZY, then LEFT turn direct KATSE, then on depicted route to DANEC.	
18L	Climb heading 183° to 1260' , then direct HISOR, then on depicted route to DANEC.	
18C	Climb heading 183° to 1260' , then direct GIRGY, then on depicted route to DANEC.	
18R	Climb heading 183° to intercept the 204° course to WEKIN, then on depicted route to DANEC.	
23	Climb heading 235° to 1260' , then direct UNCOT, then on depicted route to DANEC.	
36L	Climb heading 003° to intercept the 307° course to JIMAL, then on depicted route to DANEC.	
36C	Climb heading 003° to intercept the 325° course to EBAWI, then on depicted route to DANEC.	
36R	Climb heading 003° to intercept the 028° course to KAYFO, then LEFT turn direct KATSE, then on depicted route to DANEC.	

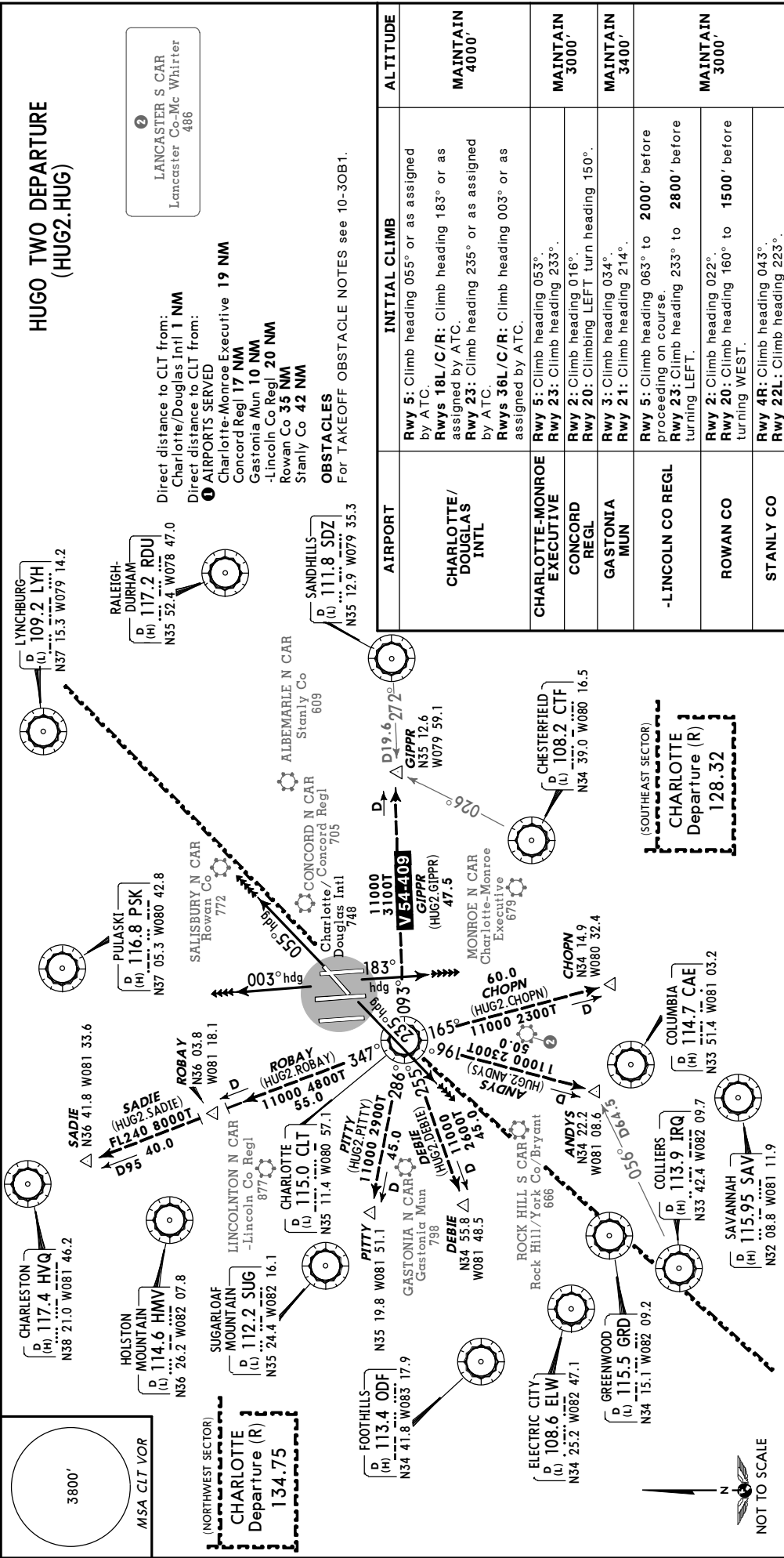
ROUTING

From DANEC on depicted route to DEBIE. EXPECT clearance to filed altitude within 10 minutes after departure.

1. **RADAR and DME required.** 2. Also serves 1
3. For propeller aircraft only.
4. -LINCOLN CO REGL, ROWAN CO,
STANLY CO only: If unable to accept
climb rate, advise ATC on initial contact.

FOR DEPARTURE
CONTROL FREQ.
SEE GRAPHIC

Trans level: FL180
Trans alt: 18000'



FOR DEPARTURE CONTROL FREQ. SEE GRAPHIC	Apt. Elev. See Graphic	Trans level: FL180 Trans alt: 18000'
FOR DEPARTURE CONTROL FREQ. SEE GRAPHIC	Apt. Elev. See Graphic	Trans level: FL180 Trans alt: 18000'

This SID requires take-off minimums
(for standard minimums, refer to airport chart):
CHARLOTTE/DOUGLAS INTL: Rwy 5: Standard (or lower
than standard, if authorized) with minimum climb of 275'
per NM to **2000'**.
Rwys 18L/C/R, 23, 36R: Standard (or lower than standard,
if authorized).
Rwy 36L: Standard (or lower than standard, if authorized)
with minimum climb of 215' per NM to **3500'**.
Rwy 36C: Standard (or lower than standard, if authorized)
with minimum climb of 208' per NM to **3400'**, or
alternatively, with standard take-off minimums (or lower
than standard, if authorized) and a normal 200' per NM
climb gradient, take-off must occur no later than 2000'
prior to DER.
CHARLOTTE-MONROE EXECUTIVE: Rwys 5, 23: Standard
(or lower than standard, if authorized).

CONCORD REGL: Rwy 2: Standard (or lower than standard,
if authorized).
Rwy 20: Standard (or lower than standard, if authorized)
with minimum climb of 318' per NM to **2400'**.
GASTONIA MUN: Rwys 3, 21: Standard (or lower than
standard, if authorized).
-LINCOLN CO REGL: Rwys 5, 23: Standard (or lower than
standard, if authorized) with minimum ATC climb of 250'
per NM to **3000'**.
ROWAN CO: Rwy 2: Standard (or lower than standard, if
authorized) with minimum ATC climb of 250' per NM to
3000'.
Rwy 20: 400-2 3/4 or standard (or lower than standard, if
authorized) with minimum climb of 204' per NM to **1300'**,
or alternatively, with standard (or lower than standard, if
authorized) take-off minimums and a normal 200' per NM
climb gradient, take-off must occur no later than 1300' prior
to DER. Minimum ATC climb of 250' per NM to **3000'**.

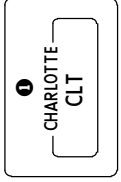
STANLY CO: Rwys 4L, 22R: Not
authorized. VFR runway.
Rwy 4R: 300-1 1/2 or standard (or lower
than standard, if authorized) with minimum
climb of 276' per NM to **1000'**. Minimum
ATC climb of 250' per NM to **3000'**.
Rwy 22L: Standard (or lower than standard,
if authorized) with minimum ATC climb of
250' per NM to **3000'**.

FOR DEPARTURE CONTROL FREQ. SEE GRAPHIC	Apt. Elev. See Graphic	Trans level: FL180 Trans alt: 18000'
FOR DEPARTURE CONTROL FREQ. SEE GRAPHIC	Apt. Elev. See Graphic	Trans level: FL180 Trans alt: 18000'

FOR DEPARTURE CONTROL FREQ. SEE GRAPHIC	Apt. Elev. See Graphic	Trans level: FL180 Trans alt: 18000'
FOR DEPARTURE CONTROL FREQ. SEE GRAPHIC	Apt. Elev. See Graphic	Trans level: FL180 Trans alt: 18000'

FOR DEPARTURE CONTROL FREQ. SEE GRAPHIC	Apt. Elev. See Graphic	Trans level: FL180 Trans alt: 18000'
FOR DEPARTURE CONTROL FREQ. SEE GRAPHIC	Apt. Elev. See Graphic	Trans level: FL180 Trans alt: 18000'

**SPEED: DO NOT EXCEED 280 KTS
UNTIL ADVISED BY ATC**



Gnd speed-KT	75	100	150	200	250	300
500' per NM	625	833	1250	1667	2083	2500

ROUTING

From LAMDE on depicted route to LILLS. EXPECT clearance to filed altitude within 10 minutes after departure

CHANGES: Procedure renumbered, note removed

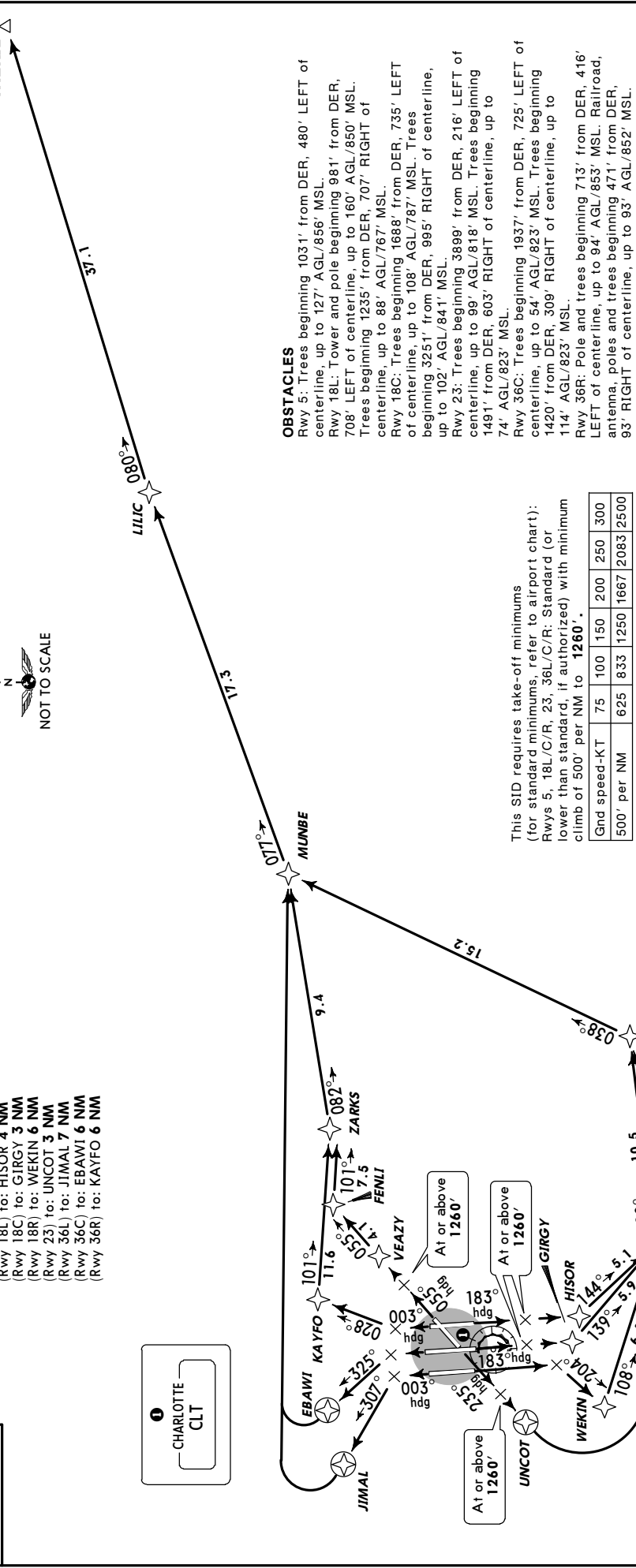
5. If unable to accept climb rates, advise ATC on initial contact.
6. Transponder code will be issued via PDC or Charlotte clearance delivery.
7. Accelerate to 250 KT, if unable, advise ATC.

3800'

MSA CLT VOR

MERIL SIX RNAV DEPARTURE
(MERIL6.MERIL)

***SPEED DO NOT EXCEED 280 KT
UNTIL ADVISED BY ATC***

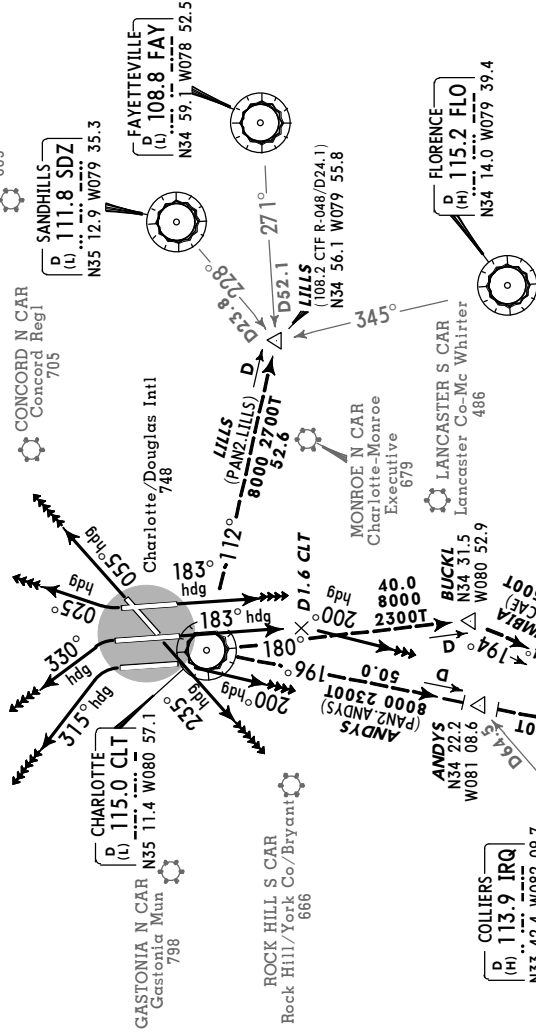


9 DEC 11
Eff 15 Dec

5. CHARLOTTE/DOUGLAS INTL only: Transponder code will be issued via PDC or Charlotte Clearance Delivery.
6. CONCORD REGL only: Transponder code will be issued via Concord ATCT or Charlotte Clearance Delivery.
7. CHARLOTTE-MONROE EXECUTIVE, GASTONIA MUN, -LINCOLN CO REGL, ROWAN CO, STANLY CO only: Transponder code will be issued via Charlotte Clearance Delivery.
8. CHARLOTTE/DOUGLAS INTL, -LINCOLN CO REGL, ROWAN CO, STANLY CO only: Accelerate to 250 KT, if unable, advise ATC.

**PANTHER TWO DEPARTURE
(PAN2.PAN)**

SALISBURY N CAR
Rowan Co
772

 711

Direct distance to CLT from:
Charlotte/Douglas Intl **1 NM**
Direct distance to CLT from:
1 AIRPORTS SERVED
Charlotte-Monroe Executive **19 NM**
Concord Regl **17 NM**
Gastonia Mun **10 NM**
-Lincoln Co Regl **20 NM**
Rowan Co **35 NM**
Stanly Co **42 NM**

This STD requires take-off minimums (for standard minimums, refer to airport chart):
CHARLOTTE/DOUGLAS INTL: Rwy 5: 23; 36C/R: Standard (or lower than standard, if authorized).
 Rwy 36L: Standard (or lower than standard, if authorized) with minimum climb of 215' per NM to **3500'.**
CHARLOTTE-MONROE EXECUTIVE: Rwy 5: 23; Standard (or lower than standard, if authorized).

CONCORD REG. Rwy 2: Standard (or lower than standard, if authorized).
Rwy 20: Standard (or lower than standard, if authorized) with minimum climb of 318' per NM to **2400'**.
GASTONIA MUN. Rwy 3, 21: Standard (or lower than standard, if authorized).

-LINCOLN CO REG: Rwy 5, 23: Standard (or lower than standard, if authorized) with minimum ATC climb of 250' per NM to 3000'.

ROWAN CO: Rwy 2: Standard (or lower than standard, if authorized) with minimum ATC climb of 250' per NIM to 3000'.

Rwy 20: 400-2 $\frac{3}{4}$ or standard (or lower than standard, if authorized), with minimum climb of 204' per NM to **1300'**, or alternatively, with standard (or lower than standard, if authorized) take-off minimums and a normal 200' per NM climb gradient, take-off must occur no later than 1300' prior to DER. Minimum ATC climb of 250' per NM to **3000'** to DER. Minimum 41M, 22R: Not authorized- VFR runway. **STANLY CO: Rwy 45, 22R: Not authorized- VFR runway.**

Rwy 4R: 300-1 1/2 or standard (or lower than standard, if authorized) with minimum climb of 276' per NM to **1000'**.
Minimum ATC climb of 250' per NM to **3000'**.
Rwy 22L: Standard (or lower than standard, if authorized) with minimum ATC climb of 250' per NM to **3000'**.

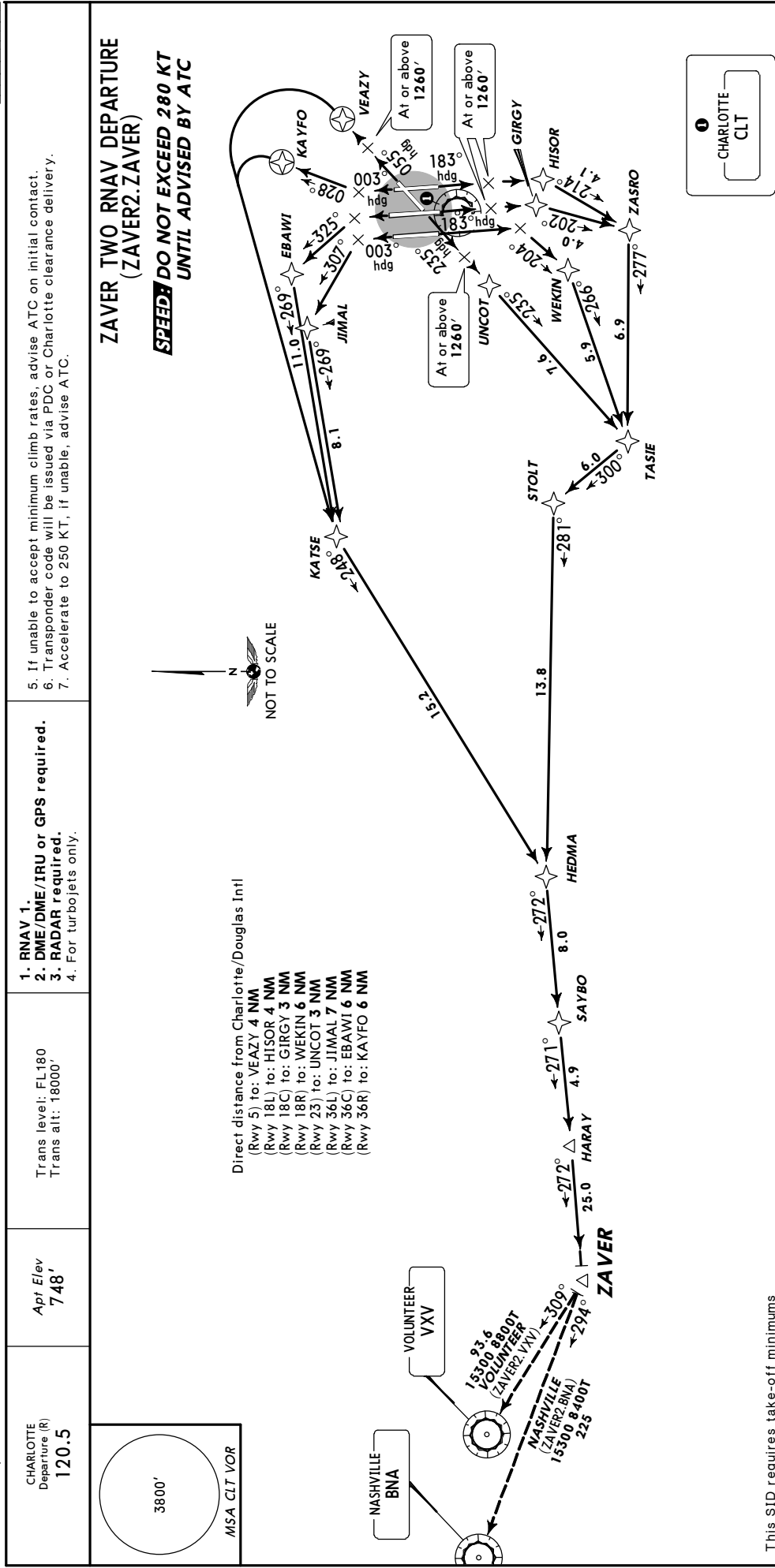
Gnd speed-KT	75	100	150	200	250	300
204' per NM	255	340	510	680	850	1020
215' per NM	269	358	538	717	896	1075
250' per NM	313	417	625	833	1042	1250
276' per NM	345	460	690	920	1150	1380
318' per NM	398	530	795	1060	1325	1590

AIRPORT	INITIAL CLIMB	ALTITUDE
CHARLOTTE / DOUGLAS INTL	Rwy 5: Climb heading 055°.	MAINTAIN 8000'
	Rwy 18L: Climb heading 183°.	
	Rwy 18C: Climb heading 183° until passing D1.6 CLT, then turn RIGHT heading 200°.	
	Rwy 18R: Climbing RIGHT turn heading 200°.	
	Rwy 23: Climb heading 235°.	
	Rwy 36L: Climbing LEFT turn heading 315°.	
CHARLOTTE-MONROE EXECUTIVE CONCORD REGL	Rwy 36C: Climbing LEFT turn heading 330°.	MAINTAIN 3000'
	Rwy 36R: Climbing RIGHT turn heading 025°.	
	Rwy 5: Climb heading 053°.	
	Rwy 23: Climb heading 233°.	
GASTONIA MUN	Rwy 2: Climb heading 016°.	MAINTAIN 3400'
	Rwy 20: Climbing LEFT turn heading 150°.	
-LINCOLN CO REGL	Rwy 3: Climb heading 034°.	MAINTAIN 3400'
	Rwy 21: Climb heading 214°.	
ROWAN CO	Rwy 5: Climb heading 063° to 2000' before proceeding on course.	MAINTAIN 3400'
	Rwy 23: Climb heading 233° to 2800' before turning LEFT.	
	Rwy 2: Climb heading 022°.	
STANLY CO	Rwy 20: Climb heading 160° to 1500' before turning WEST.	MAINTAIN 3000'
	Rwy 4R: Climb heading 043°.	
	Rwy 22L: Climb heading 223°.	

ROUTING

EXPECT RADAR vectors to intercept filed/assigned transition or enroute fix/navaid. EXPECT filed altitude/flight level 10 minutes after departure.

CHANGES: Procedure renumbered MFA also serves airports



This STD requires take-off minimums (for standard minimums, refer to airport chart):
Rwy 5, 18L/C/R, 23, 36L/C/R: Standard (or lower than standard, if authorized) with minimum climb of 500' per NM to **1260'**.

Grnd speed-KT 500' per NM	75	100	150	200	250	300
	625	833	1250	1667	2083	2500

OBSTACLES

Rwy 5: Trees beginning 1031' from DER, 480' LEFT of centerline, up to 127' AGL/856' MSL.

Rwy 18L: Tower and pole beginning 981' from DER, 708' LEFT of centerline, up to 160' AGL/850' MSL. Trees beginning 1235' from DER, 707' RIGHT of centerline, up to 88' AGL/767' MSL.

Rwy 18C: Trees beginning 1688' from DER, 735' LEFT of centerline, up to 108' AGL/787' MSL. Trees beginning 3251' from DER, 995' RIGHT of centerline, up to 102' AGL/841' MSL.

Rwy 23: Trees beginning 3899' from DER, 216' LEFT of centerline, up to 99' AGL/818' MSL. Trees beginning 1491' from DER, 603' RIGHT of centerline, up to 74' AGL/823' MSL.

Rwy 36C: Trees beginning 1937' from DER, 725' LEFT of centerline, up to 54' AGL/823' MSL. Trees beginning 1420' from DER, 309' RIGHT of centerline, up to 114' AGL/823' MSL.

Rwy 36R: Pole and trees beginning 713' from DER, 416' LEFT of centerline, up to 94' AGL/875' MSL. Railroad, antenna, poles and trees beginning 471' from DER, 93' RIGHT of centerline, up to 93' AGL/852' MSL.

RWY	INITIAL CLIMB	ALTITUDE
5	Climb heading 055° to 1260' , then direct VEAZY, then LEFT turn direct KATSE, then on depicted route to HEDMA.	
18L	Climb heading 183° to 1260' , then direct HISOR, then on depicted route to HEDMA.	
18C	Climb heading 183° to 1260' , then direct GIRGY, then on depicted route to HEDMA.	
18R	Climb heading 183° to intercept the 204° course to WEKIN, then on depicted route to HEDMA.	
23	Climb heading 235° to 1260' , then direct UNCOOT, then on depicted route to HEDMA.	MAINTAIN 8000'
36L	Climb heading 003° to intercept the 307° course to JIMAL, then on depicted route to HEDMA.	
36C	Climb heading 003° to intercept the 325° course to EBAWI, then on depicted route to HEDMA.	
36R	Climb heading 003° to intercept the 028° course to KAYFO, then LEFT turn direct KATSE, then on depicted route to HEDMA.	

ROUTING
From HEDMA on depicted route to ZAVER. EXPECT clearance to filed altitude within 10 minutes after departure.

TAKEOFF OBSTACLE NOTES**CHARLOTTE/DOUGLAS INTL**

- RWY 5:
TREES BEGINNING 1031' FROM DER, 480' LEFT OF CENTERLINE, UP TO 127' AGL/856' MSL.
- RWY 18L:
TOWER AND POLE BEGINNING 981' FROM DER, 708' LEFT OF CENTERLINE, UP TO 160' AGL/850' MSL. TREES BEGINNING 1235' FROM DER, 707' RIGHT OF CENTERLINE UP TO 88' AGL/767' MSL.
- RWY 18C:
TREES BEGINNING 1688' FROM DER, 735' LEFT OF CENTERLINE, UP TO 108' AGL/787' MSL. TREES BEGINNING 3251' FROM DER, 995' RIGHT OF CENTERLINE, UP TO 102' AGL/841' MSL.
- RWY 23:
TREES BEGINNING 3899' FROM DER, 216' LEFT OF CENTERLINE, UP TO 99' AGL/818' MSL. TREES BEGINNING 1491' FROM DER, 603' RIGHT OF CENTERLINE, UP TO 74' AGL/823' MSL.
- RWY 36C:
TREES BEGINNING 1937' FROM DER, 725' LEFT OF CENTERLINE, UP TO 54' AGL/823' MSL. TREES BEGINNING 1420' FROM DER, 309' RIGHT OF CENTERLINE, UP TO 114' AGL/823' MSL.
- RWY 36R:
POLE AND TREES BEGINNING 713' FROM DER, 416' LEFT OF CENTERLINE, UP TO 94' AGL/853' MSL. RAILROAD, ANTENNA, POLES, AND TREES BEGINNING 471' FROM DER, 93' RIGHT OF CENTERLINE, UP TO 93' AGL/852' MSL.

CHARLOTTE-MONROE EXECUTIVE

- RWY 5:
TREES BEGINNING 150' FROM DER, 202' LEFT OF CENTERLINE, UP TO 100' AGL/799' MSL. VEHICLES ON ROAD AND TREES BEGINNING 199' FROM DER, 259' RIGHT OF CENTERLINE, UP TO 100' AGL/789' MSL.

CONCORD REGL

- RWY 2:
POLES AND TREES BEGINNING 2624' FROM DER, 688' LEFT OF CENTERLINE, UP TO 45' AGL/784' MSL. TREES BEGINNING 2107' FROM DER, 787' RIGHT OF CENTERLINE, UP TO 24' AGL/783' MSL.
- RWY 20:
STREET LIGHTS BEGINNING 3047' FROM DER, 196' RIGHT OF CENTERLINE, UP TO 105' AGL/744' MSL. TREES 1.3 NM FROM DER, 1544' RIGHT OF CENTERLINE, UP TO 100' AGL/849' MSL.

GASTONIA MUN

- RWY 3:
TREES BEGINNING 1200' FROM DER, 433' LEFT OF CENTERLINE, UP TO 80' AGL/859' MSL. TREES BEGINNING 162' FROM DER, 371' RIGHT OF CENTERLINE, UP TO 136' AGL/885' MSL.
- RWY 21:
ANTENNA AND TREES BEGINNING 269' FROM DER, 210' LEFT OF CENTERLINE, UP TO 101' AGL/880' MSL. TREES BEGINNING 252' FROM DER, 264' RIGHT OF CENTERLINE, UP TO 113' AGL/882' MSL.

TAKEOFF OBSTACLE NOTES (CONTD)**-LINCOLN CO REGL**

- RWY 5:
TREES BEGINNING 1913' FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 100' AGL/999' MSL.
- RWY 23:
TREES BEGINNING 1395' FROM DER, 41' LEFT OF CENTERLINE, UP TO 100' AGL/1059' MSL. TREES BEGINNING 2068' FROM DER, 480' RIGHT OF CENTERLINE, UP TO 100' AGL/1027' MSL.

ROWAN CO

- RWY 2:
TREES BEGINNING 106' FROM DER, 474' RIGHT OF CENTERLINE, UP TO 68' AGL/787' MSL.
- RWY 20:
TREES BEGINNING 167' FROM DER, 17' RIGHT OF CENTERLINE, UP TO 114' AGL/913' MSL. TREES BEGINNING 1323' FROM DER, 4' LEFT OF CENTERLINE, UP TO 97' AGL/896' MSL. BUILDING 669' FROM DER, 361' LEFT OF CENTERLINE, 25' AGL/788' MSL.

STANLY CO

- RWY 4R:
TREE BEGINNING 4312' FROM DER, 374' RIGHT OF CENTERLINE, 78' AGL/692' MSL.
TREE 1.2 NM FROM DER, 2063' LEFT OF CENTERLINE, 98' AGL/837' MSL.
- RWY 22L:
TREES BEGINNING 190' FROM DER, 142' RIGHT OF CENTERLINE, UP TO 82' AGL/682' MSL. RAILROAD 438' FROM DER, 403' RIGHT OF CENTERLINE, 23' AGL/620' MSL.

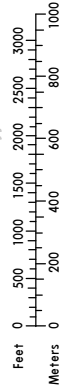
D-ATIS Departure		ACARS:		CHARLOTTE Clearance		Ramp Control		Ground	
132.1		D-ATIS		127.15		Inbound		360°-179°	
112.0		PDC		129.8		Outbound		180°-359°	
118.1		TWIP		128.32		129.8		121.9	
118.1		Tower		126.4		128.32		120.05	
118.1		Rwy 18C-36C		133.35		128.32		120.05	
118.1		Rwy 18R-36L		133.35		128.32		120.05	
118.1		Rwy 18C-36C		133.35		128.32		120.05	
118.1		Rwy 18R-36L		133.35		128.32		120.05	
118.1		Rwy 18C-36C		133.35		128.32		120.05	
118.1		Rwy 18R-36L		133.35		128.32		120.05	

LEGEND
④ DEPARTURE CALL SPOTS

Dual Taxi between Departure Call Spots
4 and 5 restricted to aircraft with
wingspans less than 171' (52m).

Dual Taxi between Departure Call Spots
6 and 7 restricted to aircraft with
wingspans less than 118' (36m).

RUNWAY INCURSION HOT SPOTS
CAUTION! Be alert when entering
the depicted areas.
See 10-9A for description of Hot Spots.



GENERAL: ASDE-X Surveillance system in use. Operate transponders with Mode C on all taxiways and runways.

Birds and deer in vicinity of airport.

Terminal Doppler Weather Radar.

Low-Level Wind Shear Alert System.

Successive or simultaneous departures from Runways 18L and 18C are authorized, with course divergence beginning no later than 3 miles from the departure end of parallel runways, due to noise abatement restrictions.

Runway status lights are in operation.

ADDITIONAL RUNWAY INFORMATION

USABLE LENGTHS

RWY			LANDING BEYOND		TAKE-OFF	WIDTH
			Threshold	Glide Slope		
5	HIRL CL MALSR PAPI-L (angle 3.0°)	grooved RVR	① 7092' 2162m	5892' 1796m		150' 46m
	23 HIRL CL REIL PAPI-R (angle 3.0°)	grooved RVR		6387' 1947m		
18R	HIRL CL TDZ ALSF-II PAPI-R (angle 2.8°)	grooved RVR		7920' 2414m		150' 46m
36L	HIRL CL TDZ ALSF-II PAPI-L (angle 3.0°)	grooved RVR		7880' 2402m		
18C	HIRL CL MALSR PAPI-R (angle 3.0°)	grooved RVR		8840' 2694m		150' 46m
36C	HIRL CL TDZ ALSF-II PAPI-L (angle 3.0°)	grooved RVR		9040' 2755m		
18L	HIRL CL REIL PAPI-L (angle 3.0°)	grooved RVR		7660' 2335m		150' 46m
36R	HIRL CL TDZ ALSF-II PAPI-R (angle 3.0°)	grooved RVR	② 8390' 2557m	7348' 2240m		

① Last 410' (125m) is unavailable for landing distance computations.

② Last 286' (87m) is unavailable for landing distance computations.

RUNWAY INCURSION HOT SPOTS

(For information only, not to be construed as ATC instructions.)

HS1 Intersection of Twy C9 and Rwy 18L, convergence of Twys R, A, C and C9 along with grass island.

HS2 Pilots exiting Rwy 18C/36C on Twy S for either Twys E or F mistakenly turn left on Twy E5 and re-enter the runway.

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

Rwys 18L/C/R, 36L/C/R					Rwys 5, 23				
2 operating RVRs are required All operating RVRs are controlling		Adequate Vis Ref	STD		Both RVRs are required and controlling	Adequate Vis Ref	STD		
CL & HIRL	CL, or RCLM & HIRL		3 & 4 Eng	1 & 2 Eng			3 & 4 Eng	1 & 2 Eng	
TDZ RVR 5	TDZ RVR 10	RVR 16 or 1/4	RVR 24 or 1/2	RVR 50 or 1	TDZ RVR 10	RVR 16 or 1/4	RVR 24 or 1/2	RVR 50 or 1	
Mid RVR 5	Mid RVR 10				Rollout RVR 10				
Rollout RVR 5	Rollout RVR 10								

OBSTACLE DP

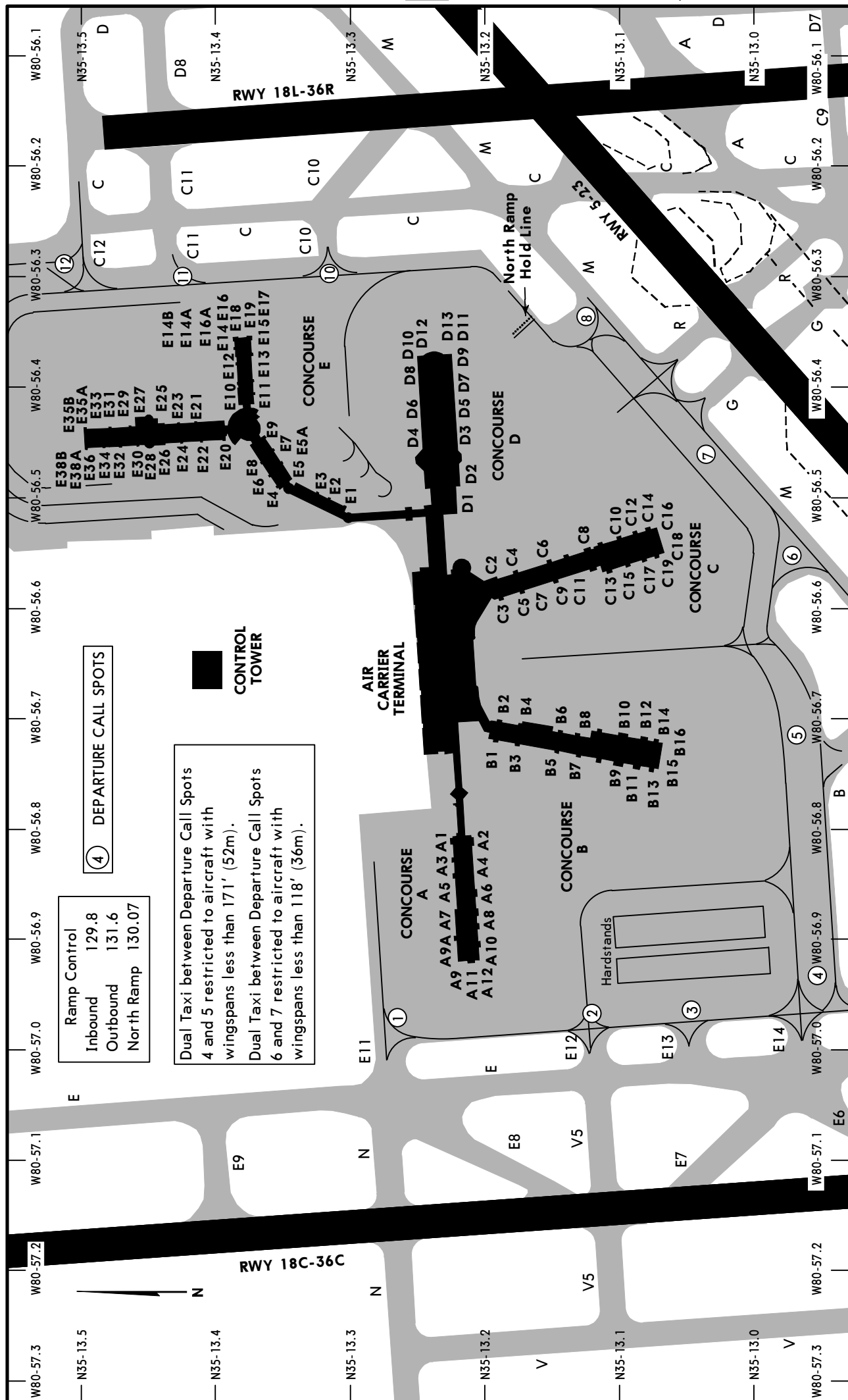
Rwy 5; Climb heading 055° to 1700' before turning right.

Rwy 36C; Climb heading 003° to 1400' before turning left.

Rwy 36L; Climb heading 003° to 1800' before turning left.

FOR FILING AS ALTERNATE

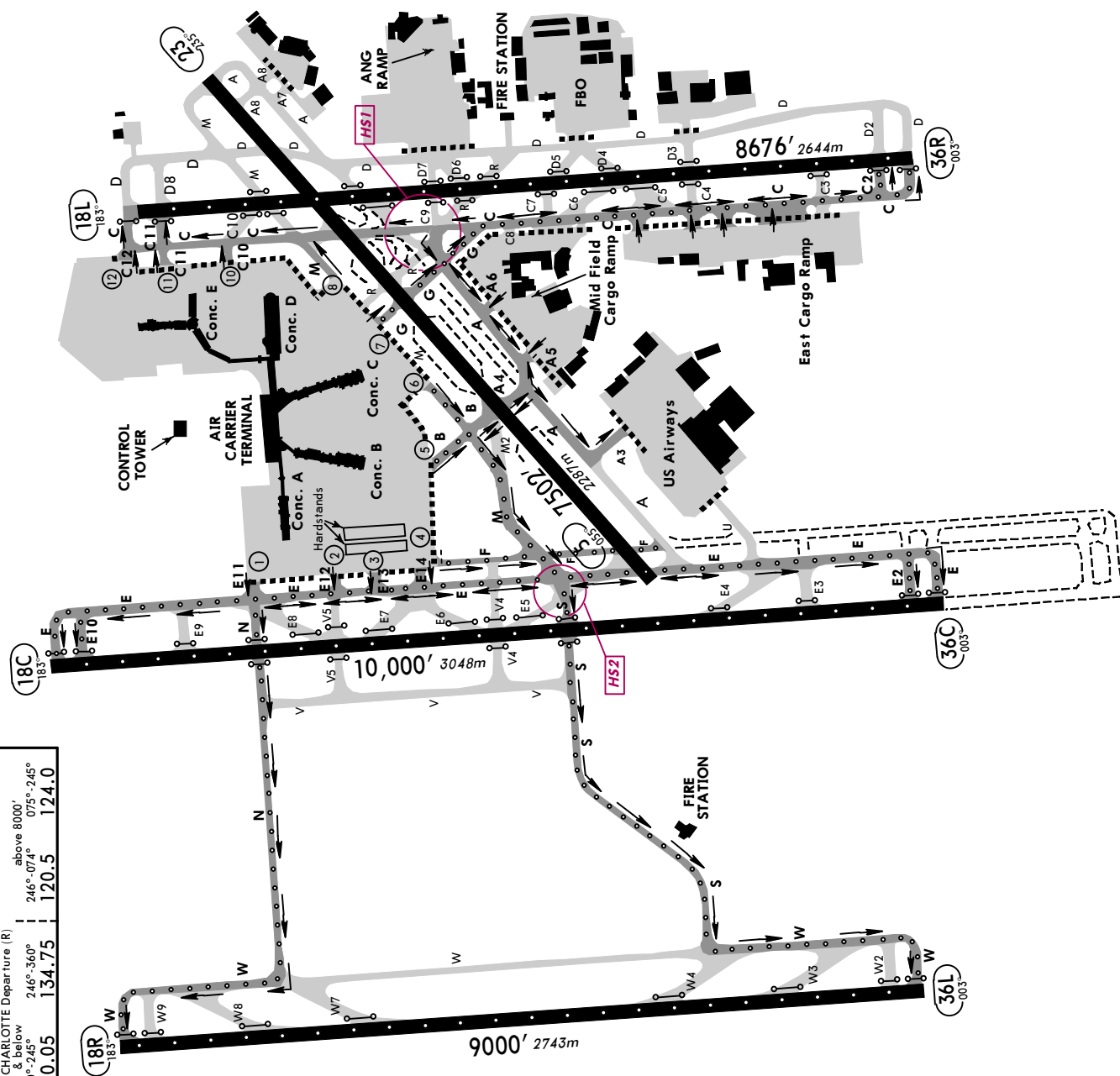
ILS Rwy 5 ILS Rwy 18L/C/R ILS Rwy 36L/C/R		ILS Rwy 23		LOC All Rwys RNAV (GPS) All Rwys RNAV (RNP) All Rwys	
A	600-2	700-2	800-2		
B					
C					
D					



PARKING GATE COORDINATES

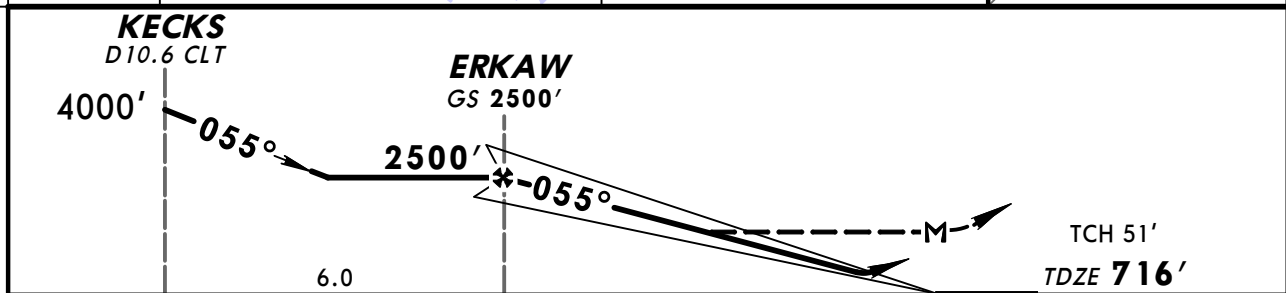
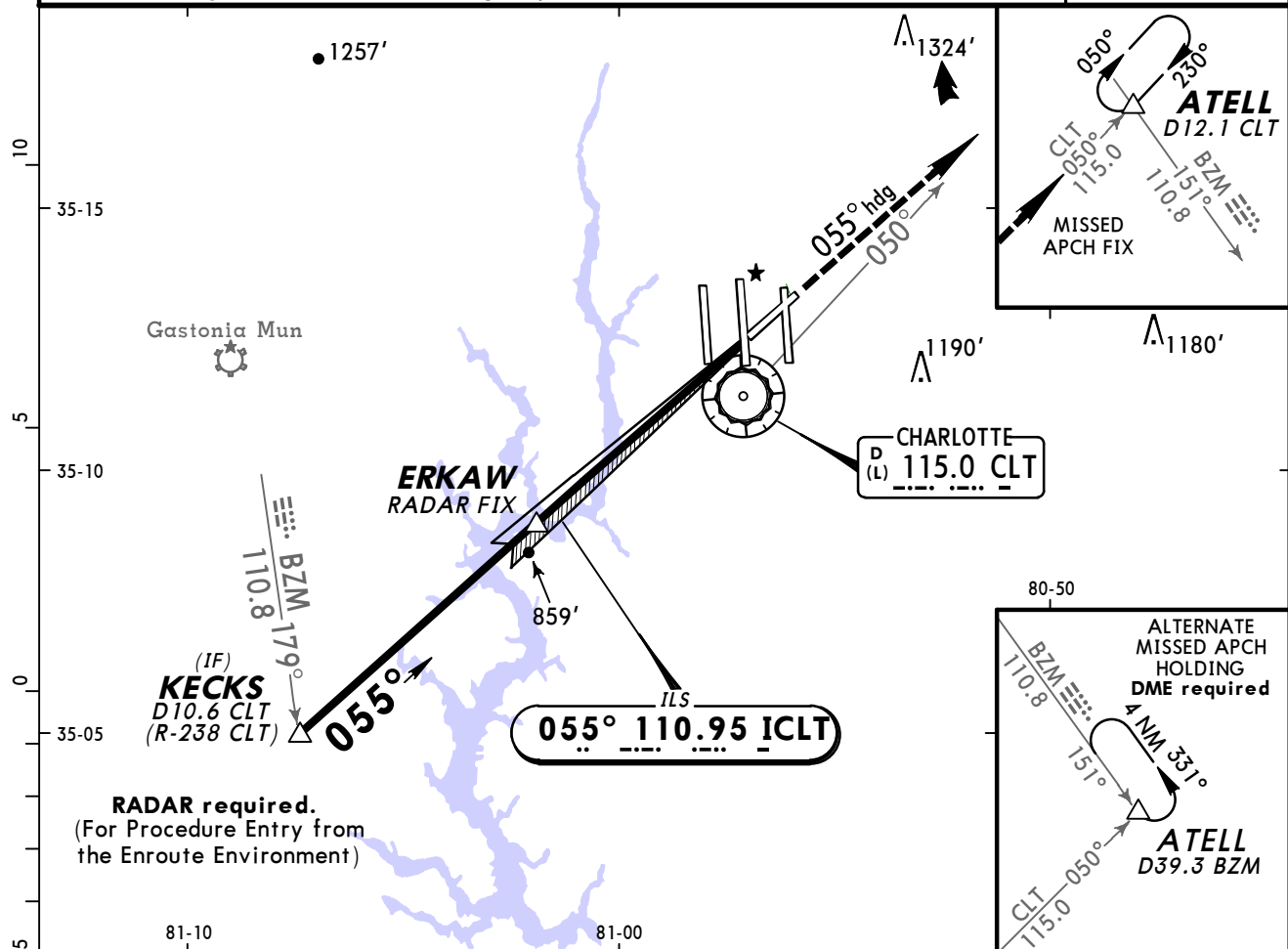
GATE No.	COORDINATES	GATE No.	COORDINATES
Concourse A		Concourse D	
A1 thru A4	N35 13.2 W080 56.8	D1, D2	N35 13.2 W080 56.5
A5 thru A12	N35 13.2 W080 56.9	D3	N35 13.2 W080 56.4
		D4	N35 13.3 W080 56.4
		D5	N35 13.2 W080 56.4
		D6	N35 13.3 W080 56.4
Concourse B			
B1 thru B5	N35 13.2 W080 56.7	D7	N35 13.2 W080 56.4
B6 thru B8	N35 13.1 W080 56.7	D8	N35 13.3 W080 56.4
B9	N35 13.1 W080 56.8	D9	N35 13.2 W080 56.4
B10	N35 13.1 W080 56.7	D10	N35 13.3 W080 56.4
B11	N35 13.1 W080 56.8	D11 thru D13	N35 13.2 W080 56.3
B12	N35 13.1 W080 56.7	Concourse E	
B13	N35 13.1 W080 56.8	E1 thru E3	N35 13.3 W080 56.5
B14 thru B16	N35 13.1 W080 56.7	E4 thru E6	N35 13.4 W080 56.5
		E7	N35 13.4 W080 56.4
Concourse C		E8	N35 13.4 W080 56.5
C2 thru C5	N35 13.2 W080 56.6	E9 thru E13	N35 13.4 W080 56.4
C6	N35 13.2 W080 56.5		
C7	N35 13.2 W080 56.6	E14 thru E19	N35 13.4 W080 56.3
C8	N35 13.1 W080 56.5	E20	N35 13.4 W080 56.5
C9	N35 13.1 W080 56.6	E21	N35 13.4 W080 56.4
		E22	N35 13.4 W080 56.5
C10	N35 13.1 W080 56.5	E23	N35 13.4 W080 56.4
C11	N35 13.1 W080 56.6		
C12	N35 13.1 W080 56.5	E24	N35 13.4 W080 56.5
C13	N35 13.1 W080 56.6	E25	N35 13.4 W080 56.4
C14	N35 13.1 W080 56.5	E26	N35 13.4 W080 56.5
		E27	N35 13.5 W080 56.4
C15	N35 13.1 W080 56.6	E28	N35 13.5 W080 56.5
C16	N35 13.1 W080 56.5		
C17	N35 13.1 W080 56.6	E29	N35 13.5 W080 56.4
C18	N35 13.1 W080 56.5	E30	N35 13.5 W080 56.5
C19	N35 13.1 W080 56.6	E31 thru E34	N35 13.5 W080 56.4
		E35A, E35B	N35 13.5 W080 56.4
		E36	N35 13.5 W080 56.4
		E38A, E38B	N35 13.5 W080 56.4

D-ATIS Departure 132.1		ACARS: D-ATIS PDC TWP		CHARLOTTE Clearance		Ramp Control		Ground	
VOT 112.0				127.15		Inbound 129.8		360°-179° 180°-359°	
						Outbound 131.6		121.9	
						Charlotte Departure (R)			
Tower									
Rwys 5-23 & 18C-36R		Rwy 18C-36C		8000' & below		246°-360°		above 8000'	
118.1		126.4		001°-119°		120°-245°		246°-074° 075°-245°	
		133.35		128.32		120.05		120.5	

[illegible]

BRIEFING STRIP™

D-ATIS		CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
Arrival	Above 8000'		8000' & Below			Rwys 5-23 & 18L-36R		Rwy 18C-36C	Rwy 18R-36L	360°-179° 180°-359°	
121.15	120.5	124.0	128.32	120.05	134.75	118.1	126.4	133.35	121.9	121.8	
LOC ICLT 110.95		Final Apch Crs 055°		GS ERKAW 2500' (1784')		ILS DA(H) 916' (200')		Apt Elev 748' TDZE 716'		3800' MSA CLT VOR	
MISSED APCH: Climb to 4000' via heading 055° and outbound on CLT VOR R-050 to ATELL INT/D12.1 CLT and hold, continue climb-in-hold to 4000'.											
Alt Set: INCHES		Trans level: FL 180				Trans alt: 18000'					
1. RADAR required. 2. VGSI and ILS glidepath not coincident.											



Gnd speed-Kts	70	90	100	120	140	160	MALSR		4000'	055°	CLT	ATELL
GS	3.00°	372	478	531	637	743	849	PAPI	↑	via	115.0	
ERKAW to MAP	5.4	4:38	3:36	3:14	2:42	2:19	2:02					

STRAIGHT-IN LANDING RWY5					CIRCLE-TO-LAND	
ILS DA(H) 916' (200')		LOC (GS out) MDA(H) 1120' (404')			Not Authorized at Night	
FULL	RAIL or ALS out	RAIL out	ALS out	Max Kts	MDA(H)	
A				90	1240' (492') - 1	
B	1 RVR 24 or 1/2	RVR 40 or 3/4	RVR 24 or 1/2	120	1260' (512') - 1 1/2	
C				140	1300' (552') - 2	
D				165		

1 RVR 18 with Flight Director or Autopilot or HUD to DA.

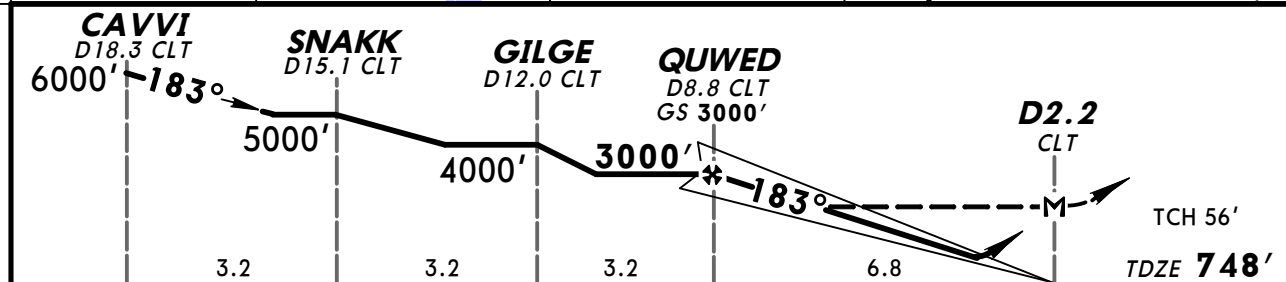
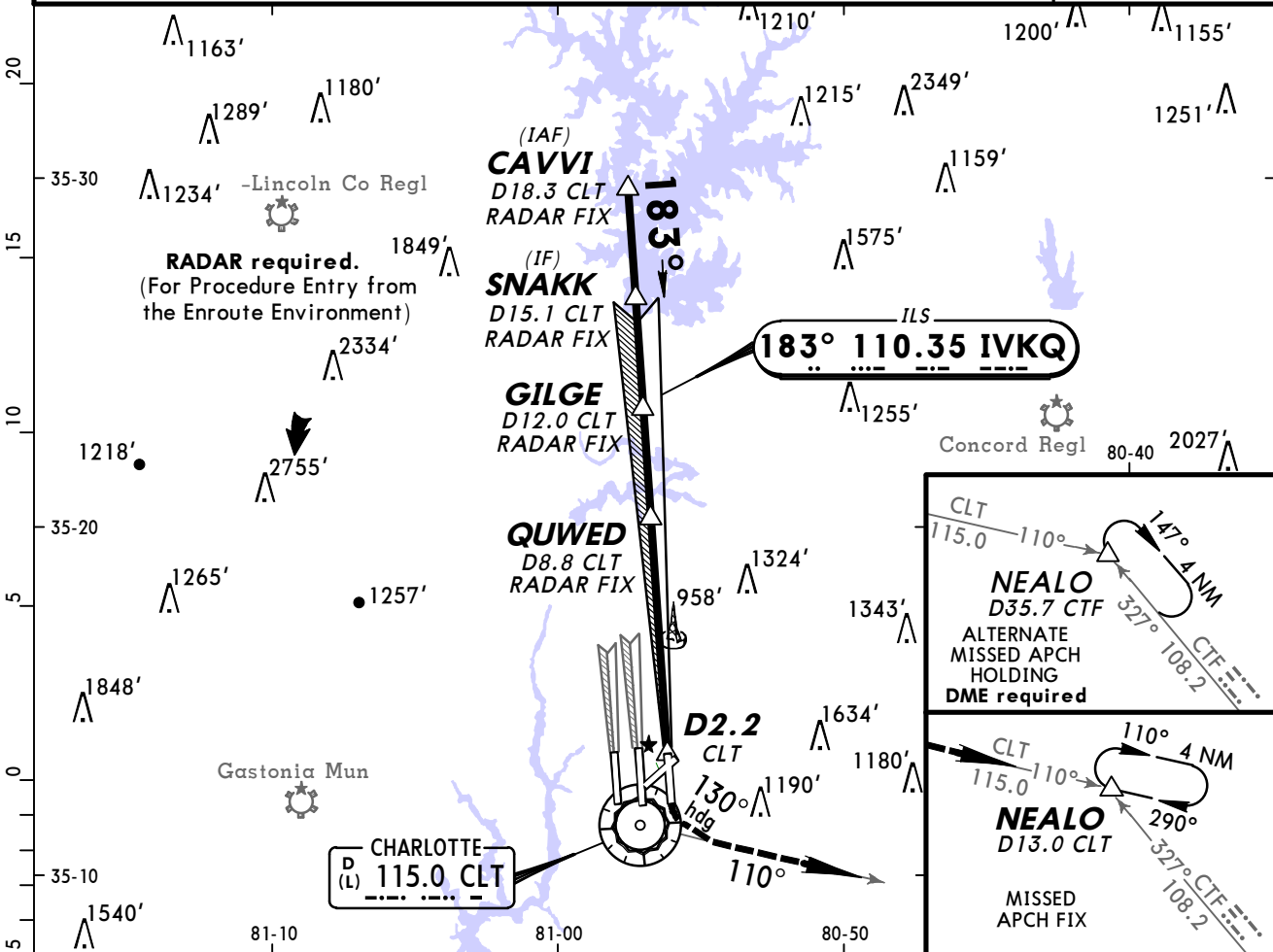
CHANGES: Radar required notes.

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TERPS AMEND 38 11 FEB 2010

KCLT/CLT CHARLOTTE/DOUGLAS INTL 17 JAN 14 11-2 CHARLOTTE, N CAR ILS or LOC Rwy 18L

BRIEFING STRIP™	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground		
	D-ATIS	Above 8000'			8000' & Below		Rwys 5-23	Rwy	Rwy	360°-179°	180°-359°
	Arrival	246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	& 18L-36R	18C-36C	18R-36L		
	121.15	120.5	124.0	128.32	120.05	134.75	118.1	126.4	133.35	121.9	121.8
	LOC IVKQ 110.35		Final Apch Crs 183°		GS QUWED 3000' (2252')		ILS DA(H) 1022' (274')		Apt Elev 748' TDZE 748'		3800' MSA CLT VOR
MISSED APCH: Climb to 1240' then climbing LEFT turn to 4000' via heading 130° and outbound via CLT VOR R-110 to NEALO/D13.0 CLT and hold.											
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'											
1. DME or RADAR required. 2. Simultaneous approach authorized with Rwys 18C/R. 3. Visibility reduction by helicopters not authorized. 4. VGSI and ILS glidepath not coincident.											

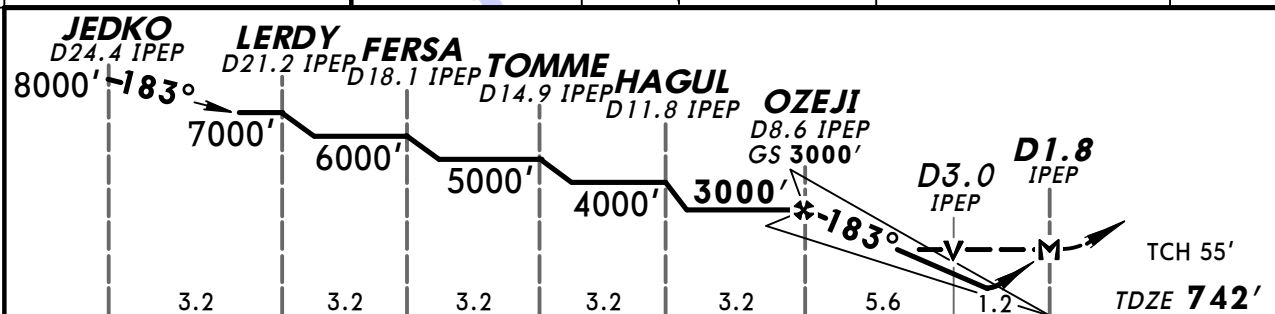
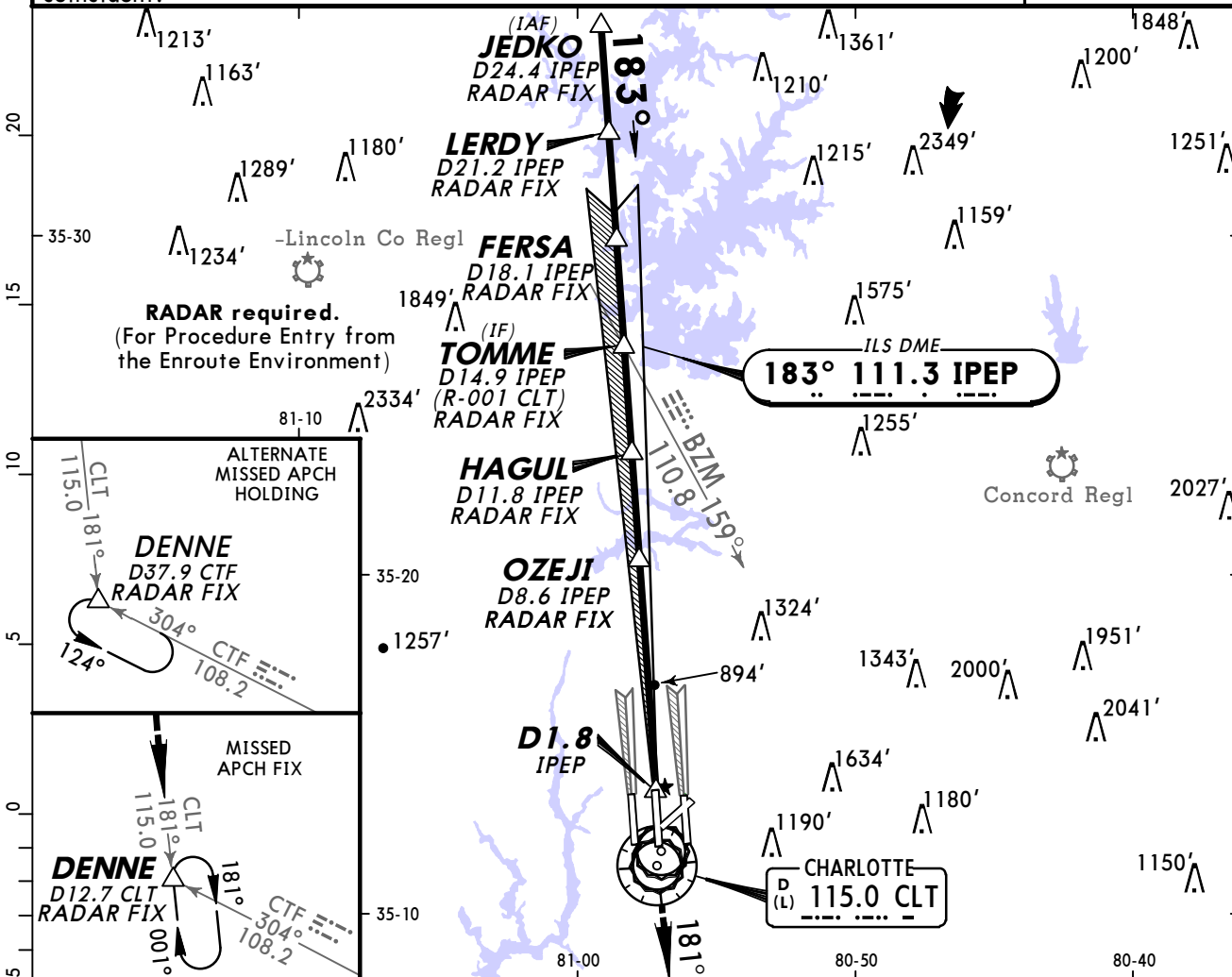


Gnd speed-Kts	70	90	100	120	140	160					
GS	3.00°	372	478	531	637	743	849				
MAP at D2.2 CLT or QUWED to MAP 6.8	5:50	4:32	4:05	3:24	2:55	2:33					

REIL	1240'	4000'	130°	CLT
VASI-R	↑	LT ↶	via hdg and	115.0
				R-110

STRAIGHT-IN LANDING RWY 18L				CIRCLE-TO-LAND			
ILS		LOC (GS out)		DAY		NIGHT	
DA(H) 1022' (274')		MDA(H) 1260' (512')		Max Kts			
RVR 50 or 1		RVR 50 or 1		90	1260' (512') - 1	NA	
				120	1260' (512') - 1		
				140	1260' (512') - 1½		
				165	1300' (552') - 2		

BRIEFING STRIP™	D-ATIS	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
	Arrival	Above 8000'		8000' & Below			Rwy	Rwys 5-23	Rwy	360°-179°	180°-359°
		246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	18C-36C	& 18L-36R	18R-36L		
	121.15	120.5	124.0	128.32	120.05	134.75	126.4	118.1	133.35	121.9	121.8
	LOC IPEP	Final Apch Crs		GS OZEJI		ILS DA(H)	Apt Elev 748'		3800' MSA CLT VOR		
	111.3	183°		3000' (2258')		942' (200')	TDZE 742'				
MISSED APCH: Climb to 3000', outbound on CLT VOR R-181 to DENNE INT/D12.7 CLT and hold, or as directed by ATC.											
Alt Set: INCHES											



Gnd speed-Kts	70	90	100	120	140	160	MALSR		CLT	DENNE
GS	3.00°	372	478	531	637	743	3000'		115.0	
MAP at D1.8 IPEP or OZEJI to MAP	6.8	5:50	4:32	4:05	3:24	2:55	PAPI		R-181	

STRAIGHT-IN LANDING RWY18C					CIRCLE-TO-LAND	
ILS		LOC (GS out)			Not Authorized at Night	
DA(H) 942' (200')		MDA(H) 1200' (458')			Max Kts	
FULL	RAIL or ALS out	RAIL out		ALS out	MDA(H)	
A	RVR 24 or 1/2	RVR 24 or 1/2		RVR 50 or 1	90	1240' (492') - 1
B		RVR 40 or 3/4		RVR 50 or 1	120	1260' (512') - 1 1/2
C		RVR 40 or 3/4		RVR 50 or 1	140	1300' (552') - 2
D		RVR 50 or 1		RVR 50 or 1	165	1300' (552') - 2

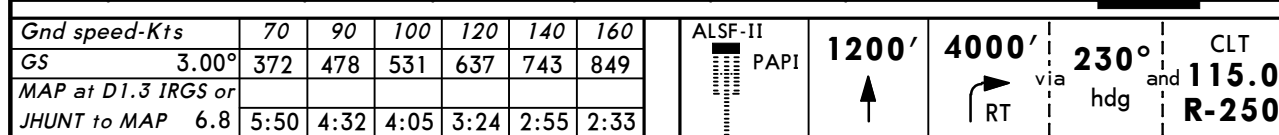
1 RVR 18 with Flight Director or Autopilot or HUD to DA.

CHANGES: Radar required notes, IPEP name change.

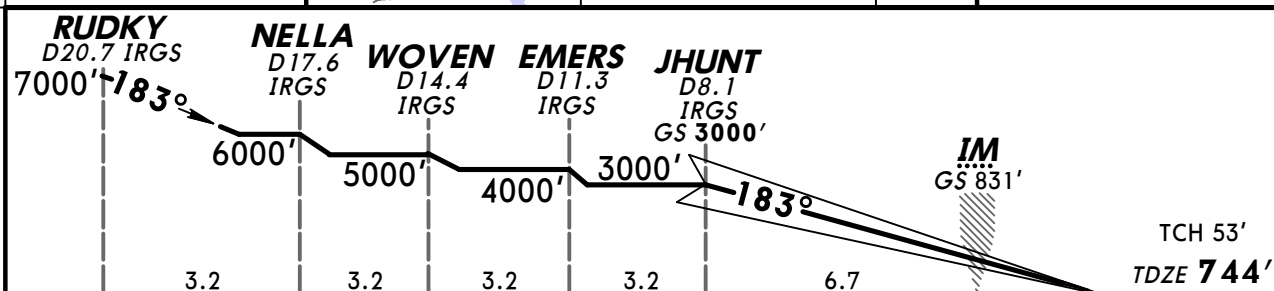
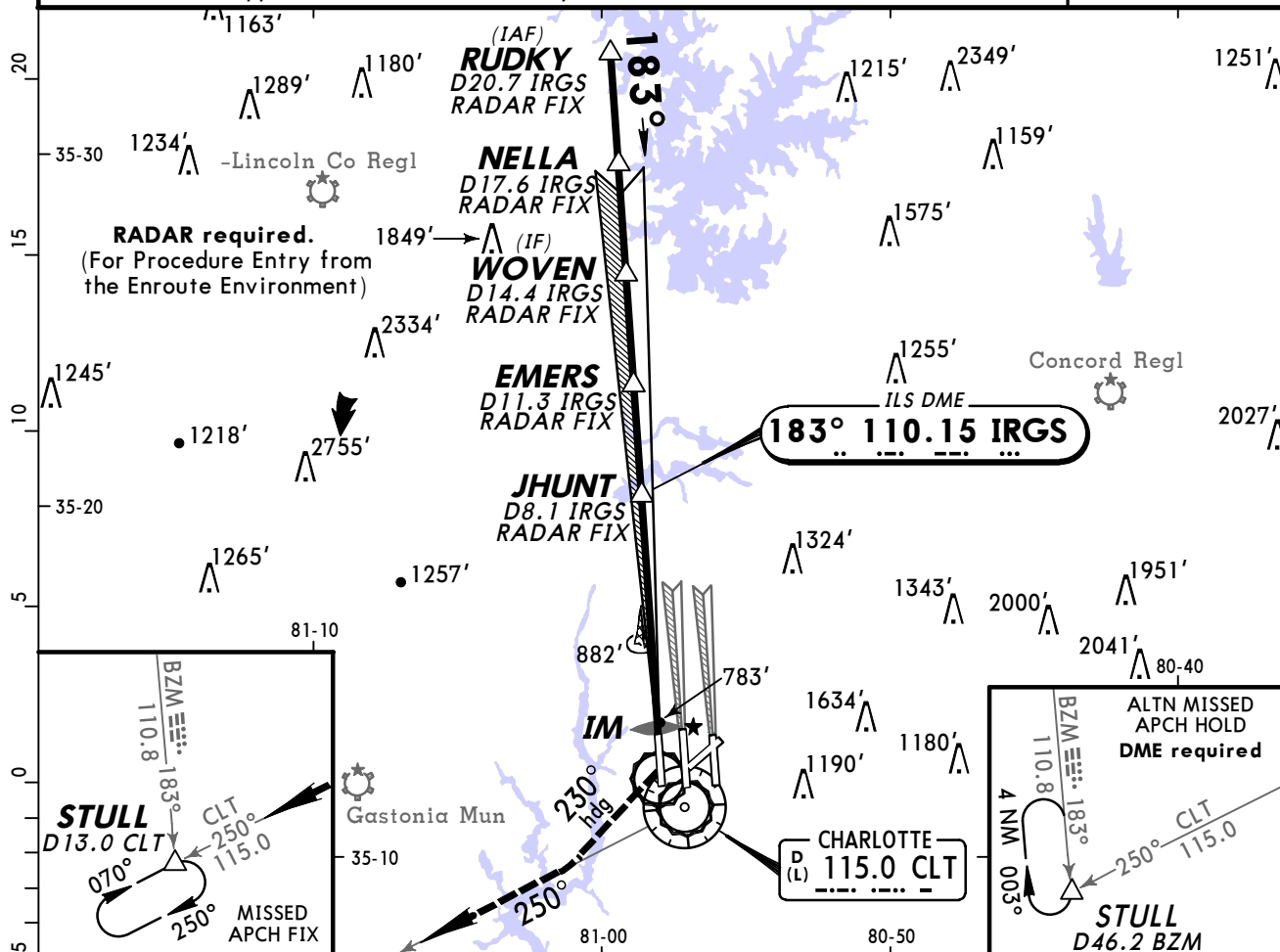
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TERPS AMEND 10C 17 OCT 2013

BRIEFING STRIP™

TERPS AMEND 08 31 MAY 2012

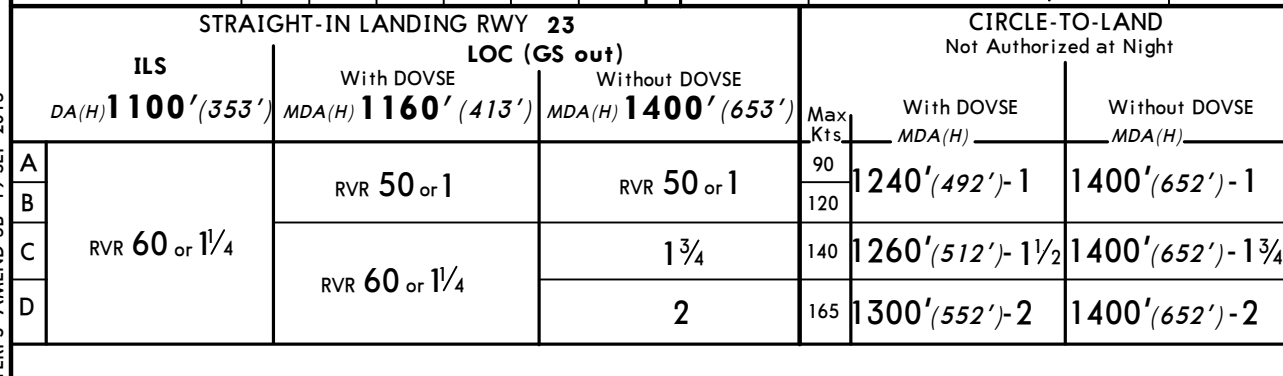
BRIEFING STRIP™	D-ATIS Arrival	CHARLOTTE Approach (R)				CHARLOTTE Tower			Ground
		Above 8000'	8000' & Below			Rwy 18R-36L	Rwys 5-23 & 18L-36R	Rwy 18C-36C	360°-179° 180°-359°
	121.15	120.5	124.0	128.32	120.05	134.75	133.35	118.1	126.4
	LOC IRGS	Final Apch Crs	GS JHUNT	CAT IIIC	CAT IIIB	CAT IIIA	CAT II RA 106'	Apt Elev 748'	
	110.15	183°	3000' (2256')	NA	Refer to Minimums		DA(H) 844' (100')	TDZE 744'	
MISSED APCH: Climb to 1200' then climbing RIGHT turn to 4000' via heading 230° and outbound on CLT VOR R-250 to STULL INT/D13.0 CLT and hold.									3800'
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Special Aircrew & Acft Certification Required. 2. DME or RADAR required. 3. Simultaneous approach authorized with Rwy 18C/L.									MSA CLT VOR



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	1200'	4000'	230°	CLT
GS	3.00°	372	478	531	637	743	PAPI	↑	RT	hdg	R-250

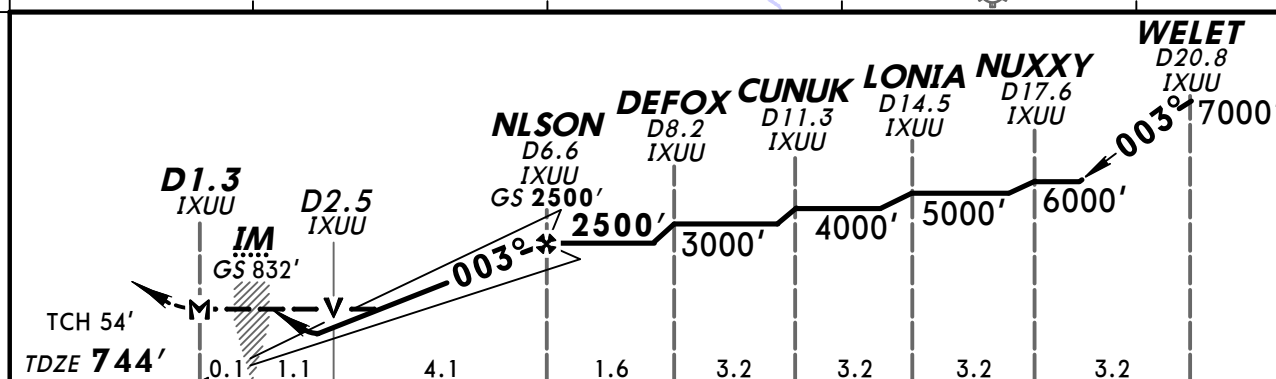
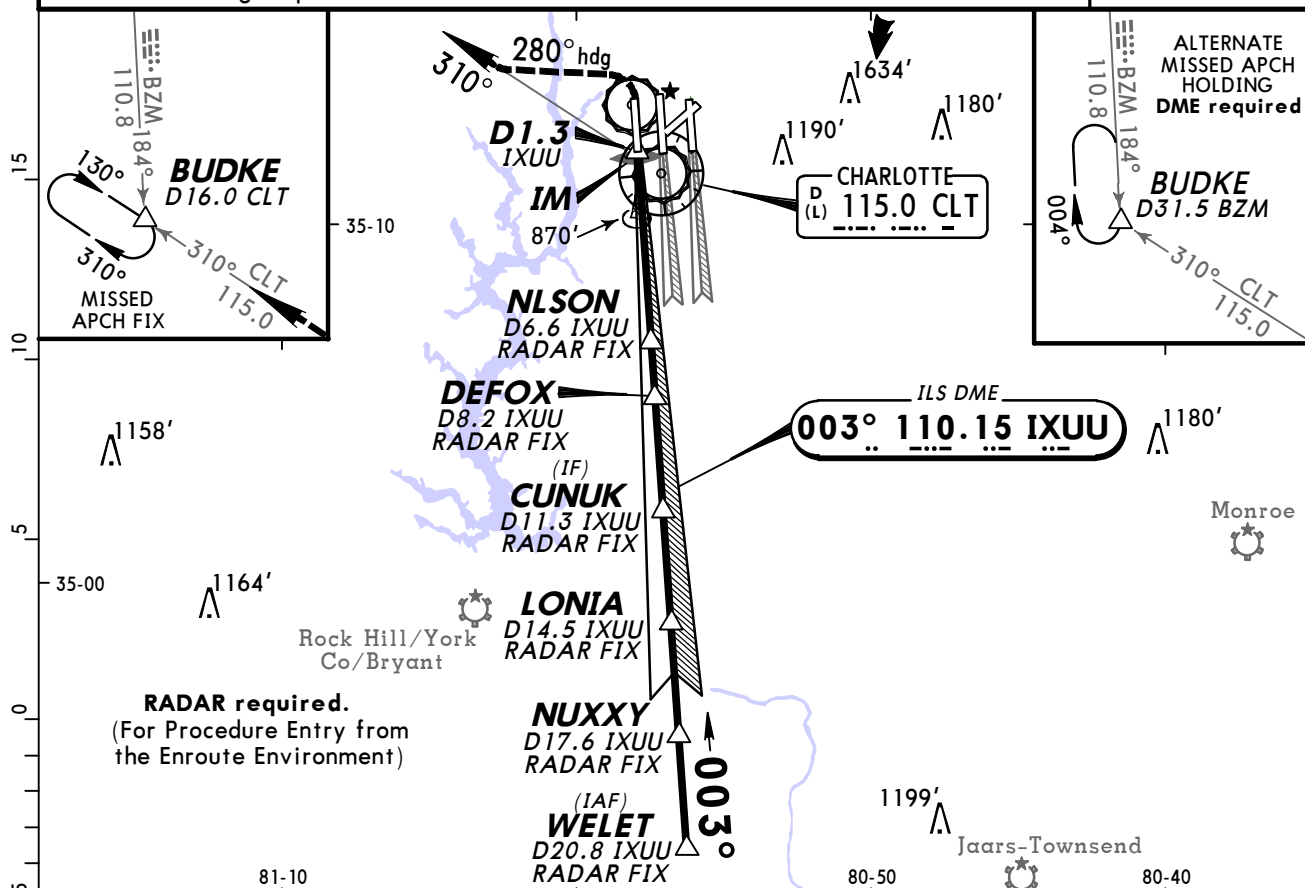
STRAIGHT-IN LANDING RWY 18R			
CAT IIIC ILS	CAT IIIB ILS	CAT IIIA ILS	CAT II ILS RA 106'
NA	RVR 6	RVR 7	DA(H) 844' (100')
			RVR 12

BRIEFING STRIP™



BRIEFING STRIP™

D-ATIS	CHARLOTTE Approach (R)						CHARLOTTE Tower			Ground	
Arrival	Above 8000'		8000' & Below				Rwy	Rwys 5-23	Rwy	360°-179°	180°-359°
	246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	18R-36L	& 18L-36R	18C-36C			
121.15	120.5	124.0	128.32	120.05	134.75	133.35	118.1	126.4	121.9	121.8	
LOC IXUU 110.15		Final Apch Crs 003°		GS NLSON 2500' (1756')		ILS DA(H) 944' (200')		Apt Elev 748' TDZE 744'		3800' MSA CLT VOR	
MISSED APCH: Climb to 1200' then climbing LEFT turn to 4000' via heading 280° and outbound on CLT VOR R-310 to BUDKE INT/D16.0 CLT and hold.											
Alt Set: INCHES											

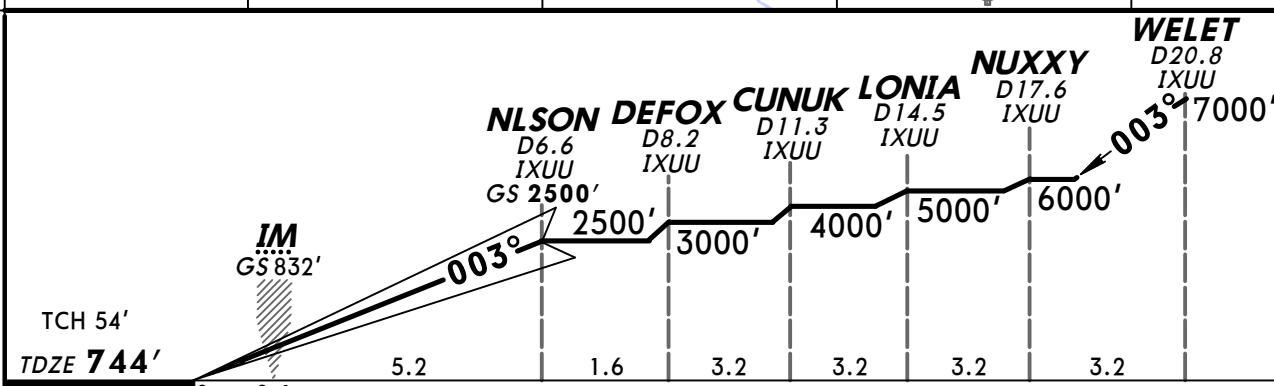
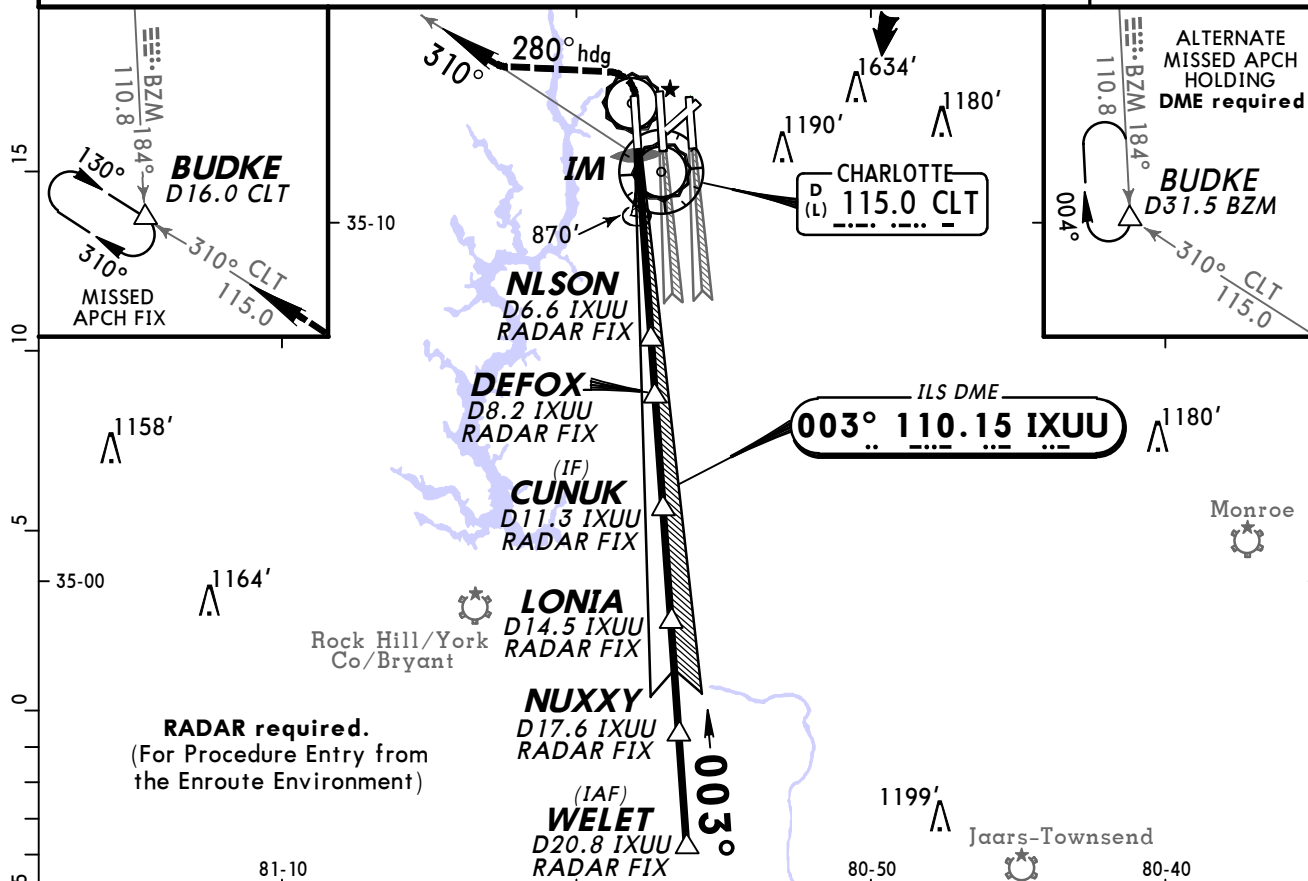


Gnd speed-Kts	70	90	100	120	140	160	ALSIF-II		1200'	4000'	280°	CLT
GS	3.00°	372	478	531	637	743	849	PAPI	↑	LT	hdg	115.0
MAP at D1.3 IXUU or NLSON to MAP	5.3	4:33	3:32	3:11	2:39	2:16	1:59					R-310

STRAIGHT-IN LANDING RWY 36L					CIRCLE-TO-LAND		
ILS			LOC (GS out)		Not Authorized at Night		
DA(H) 944' (200')			MDA(H) 1180' (436')				
FULL	TDZ or CL out	ALS out		ALS out	Max Kts	MDA(H)	
A					90	1240' (492') - 1	
B					120		
C	RVR 18 or 1/2	RVR 24 or 1/2	RVR 40 or 3/4	RVR 40 or 3/4	140	1260' (512') - 1 1/2	
D				RVR 50 or 1	165	1300' (552') - 2	

BRIEFING STRIP™

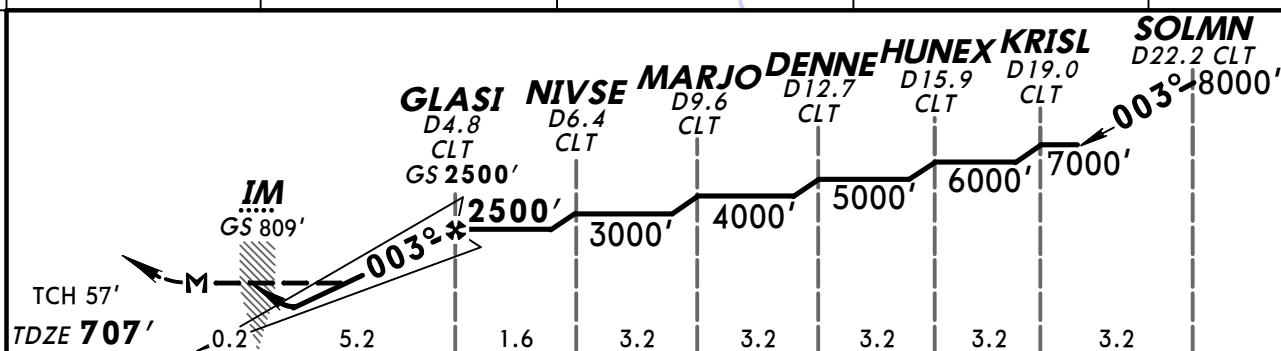
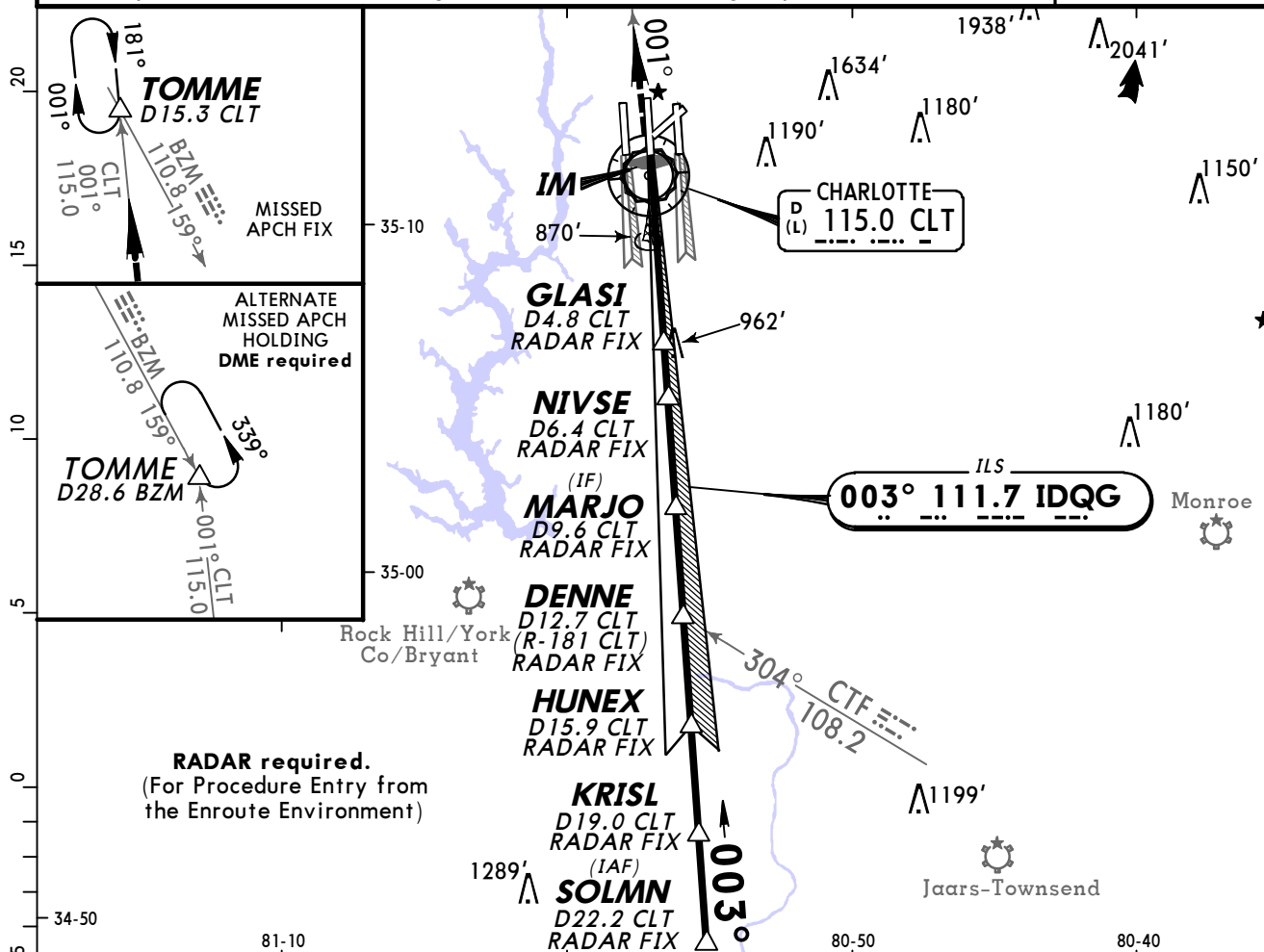
D-ATIS Arrival		CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
		Above 8000'		8000' & Below			Rwy	Rwys 5-23	Rwy	360°-179° 180°-359°	
121.15		246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	18R-36L	& 18L-36R	18C-36C	121.9	121.8
LOC IXUU	Final Apch Crs	GS NLSON		CAT IIIC	CAT IIIB	CAT IIIA	CAT II RA 106'		Apt Elev 748'	3800' MSA CLT VOR	
110.15	003°	2500' (1756')		NA	Refer to Minimums		DA(H) 844' (100')		TDZE 744'		
MISSED APCH: Climb to 1200' then climbing LEFT turn to 4000' via heading 280° and outbound on CLT VOR R-310 to BUDKE INT/D16.0 CLT and hold.											
Alt Set: INCHES		Trans level: FL 180					Trans alt: 18000'				
1. Special Aircrew & Acft Certification Required. 2. DME or RADAR required.											
3. Simultaneous approach authorized with Rwys 36C/R. 4. VGSI and ILS glidepath not coincident.											



Gnd speed-Kts	70	90	100	120	140	160	ALSIF-II		1200'	4000'	280°	CLT
GS	3.00°	372	478	531	637	743	PAPI		↑	↙	via	115.0
											hdg	R-310

STRAIGHT-IN LANDING RWY36L				CAT II ILS	
CAT IIIC ILS	CAT IIIB ILS	CAT IIIA ILS		RA 106'	
				DA(H) 844' (100')	
NA	RVR 6	RVR 7		RVR 12	

BRIEFING STRIP™	D-ATIS		CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
	Arrival	Above 8000'		8000' & Below			Rwy	Rwys 5-23	Rwy	360°-179° 180°-359°		
		246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	18C-36C	& 18L-36R	18R-36L			
	121.15	120.5	124.0	128.32	120.05	134.75	126.4	118.1	133.35	121.9 121.8		
	LOC IDQG 111.7		Final Apch Crs 003°		GS GLASI 2500' (1793')		ILS DA(H) 907' (200')		Apt Elev 748' TDZE 707'		3800' MSA CLT VOR	
MISSED APCH: Climb to 3000' outbound on CLT VOR R-001 to TOMME/ D15.3 CLT and hold, or as directed by ATC.												
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. DME or RADAR required. 2. Simultaneous approach authorized with ILS or LOC Rwy 36L, ILS Rwy 36L Cat II & III, ILS or LOC Rwy 36R, ILS Rwy 36R Cat II & III. 3. IDQG LOC Rwy 36C unusable for rollout guidance. 4. VGSI and ILS glidepath not coincident.												



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II PAPI
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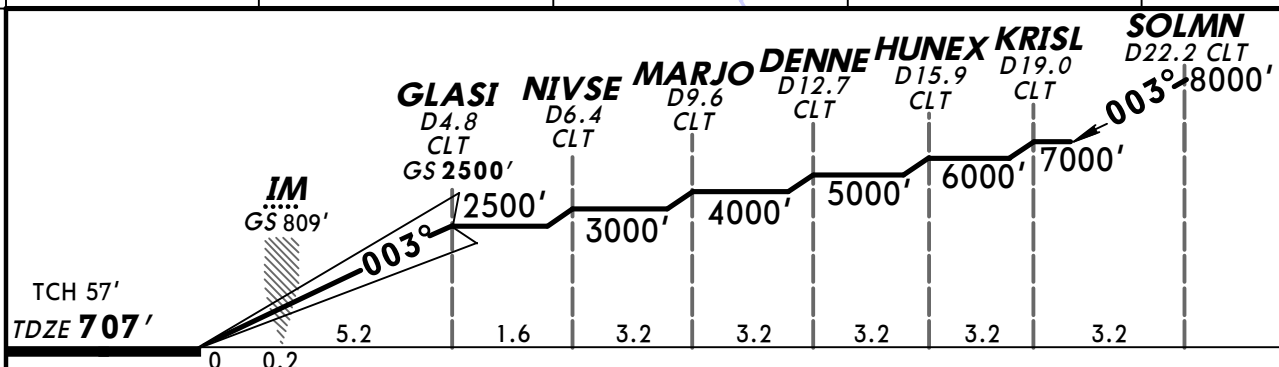
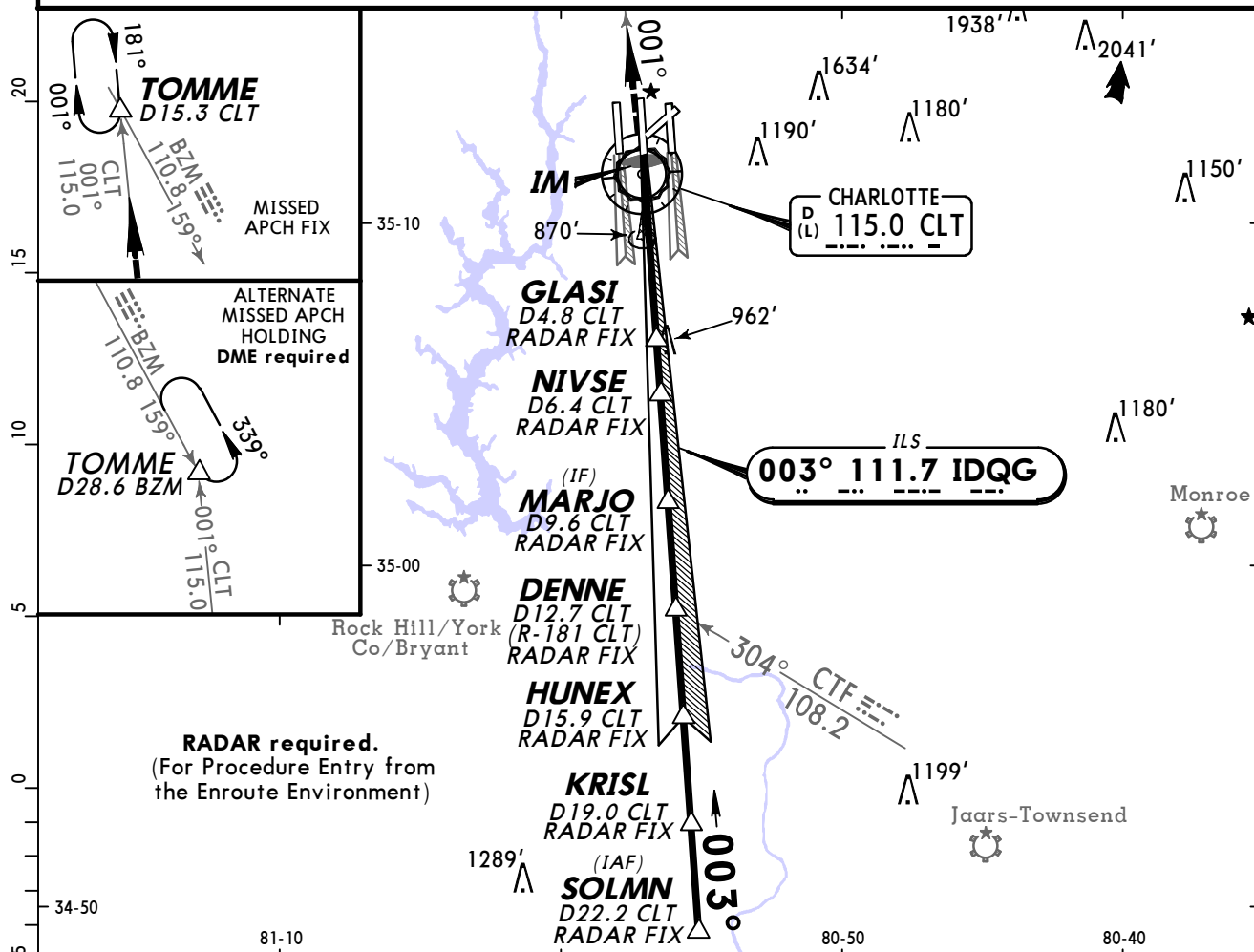
STRAIGHT-IN LANDING RWY36C						CIRCLE-TO-LAND		
ILS			LOC (GS out)			DAY		NIGHT
DA(H) 907' (200')			MDA(H) 1120' (413')			Max Kts	MDA(H)	
FULL	TDZ or CL out	ALS out		ALS out		90/120	1240' (492')-1	NA
A/B					RVR 50 or 1	140	1260' (512')-1 1/2	
C	RVR 18 or 1/2	RVR 24 or 1/2	RVR 40 or 3/4	RVR 24 or 1/2	RVR 60 or 1/4	165	1300' (552')-2	
D								

KCLT/CLT CHARLOTTE/DOUGLAS INTL 17 JAN 14 11-7A ILS Rwy 36C CAT II & III

BRIEFING STRIP™	CHARLOTTE Approach (R)				CHARLOTTE Tower			Ground	
	D-ATIS	Above 8000'	8000' & Below		Rwy 18C-36C	Rwys 5-23 & 18L-36R	Rwy 18R-36L	360°-179°	180°-359°
	Arrival	246°-074° 121.15	075°-245° 120.5	001°-119° 128.32	120°-245° 120.05	246°-360° 134.75	126.4	118.1	133.35
LOC IDQG	Final Apch Crs	GS GLASI 2500' (1793')	CAT IIIC	CAT IIIB	CAT IIIA	CAT II RA 126' DA(H) 807' (100')	Apt Elev 748'	3800'	
	111.7	003°	NA	Refer to Minimums			TDZE 707'		
MISSED APCH: Climb to 3000' outbound on CLT VOR R-001 to TOMME/D15.3 CLT and hold, or as directed by ATC.									MSA CLT VOR

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

1. Special Aircrew & Acft Certification Required. 2. DME or RADAR required. 3. Simultaneous approach authorized with ILS or LOC Rwy 36L, ILS Rwy 36L Cat II & III, ILS or LOC Rwy 36R, ILS Rwy 36R Cat II & III. 4. IDQG LOC Rwy 36C unusable for rollout guidance. 5. VGSI and ILS glidepath not coincident.



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II PAPI	3000' on CLT 115.0 R-001	TOMME
GS	3.00°	372	478	531	637	743			

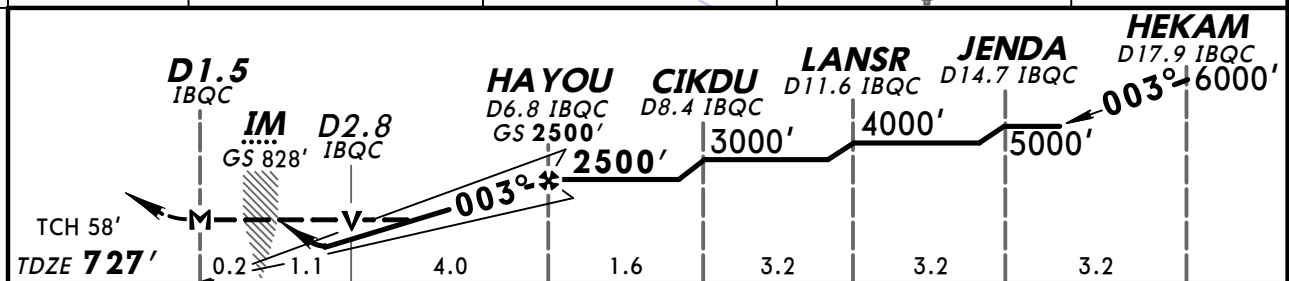
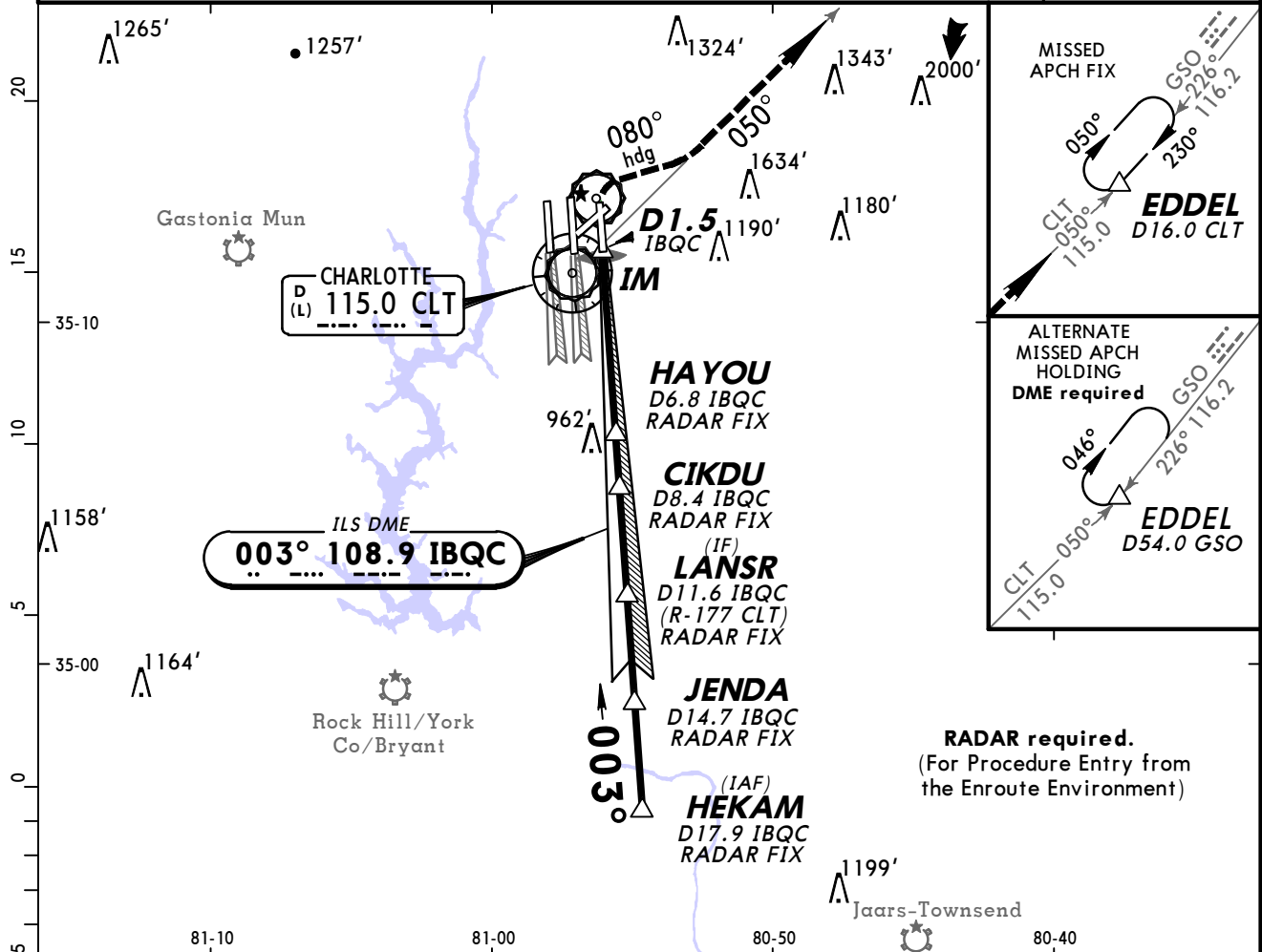
STRAIGHT-IN LANDING RWY 36C			
CAT IIIC	CAT IIIB ILS	CAT IIIA ILS	CAT II ILS RA 126' DA(H) 807' (100')
NA	RVR 7	RVR 7	RVR 12

CHANGES: Radar required notes.

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TERPS AMEND 16B 5 APR 2012

BRIEFING STRIP™	D-ATIS	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
	Arrival	Above 8000'		8000' & Below			Rwys 5-23 & 18L-36R	Rwy 18C-36C	Rwy 18R-36L	360°-179°	180°-359°
	121.15	120.5	124.0	128.32	120.05	134.75	118.1	126.4	133.35	121.9	121.8
	LOC IBQC	Final Apch Crs		GS HAYOU		ILS DA(H)	Apt Elev 748'		3800' MSA CLT VOR		
	108.9	003°		2500' (1773')		927' (200')	TDZE 727'				
	MISSED APCH: Climb to 1200' then climbing RIGHT turn to 4000' via heading 080° and outbound on CLT VOR R-050 to EDDEL/D16.0 CLT and hold.										
Alt Set: INCHES											



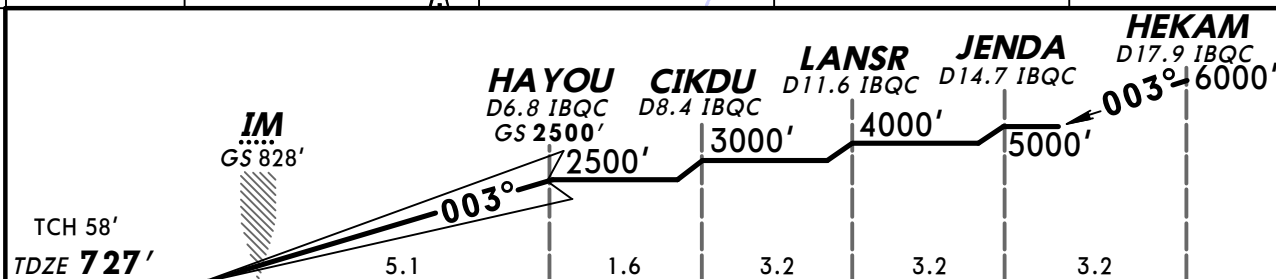
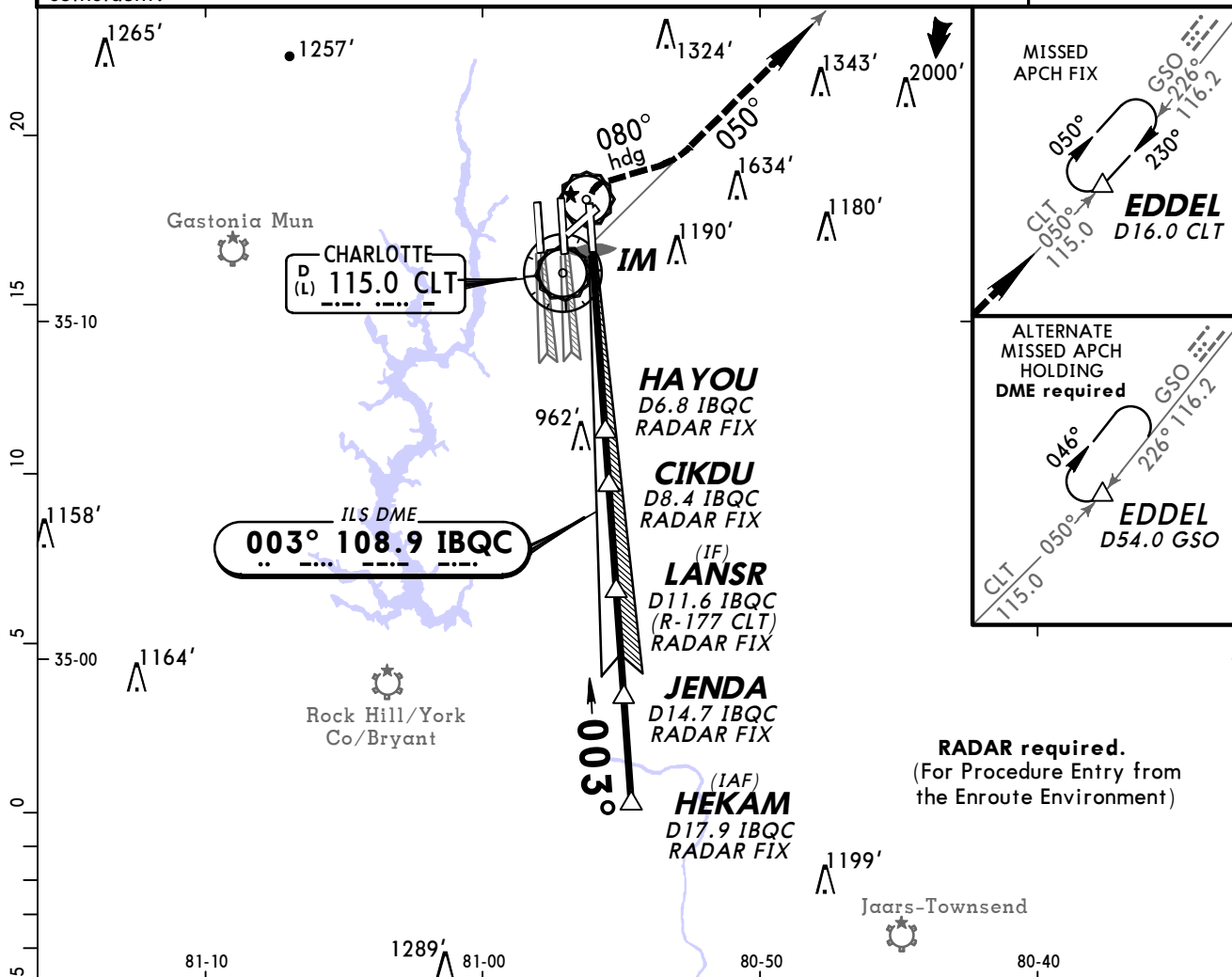
Gnd speed-Kts	70	90	100	120	140	160	ALSIF-II	1200'	4000'	080°	CLT
GS	3.00°	372	478	531	637	743	PAPI	↑	RT	hdg	and 115.0
MAP at D1.5 IBQC or HAYOU to MAP	5.3	4:33	3:32	3:11	2:39	2:16	1:59				R-050

STRAIGHT-IN LANDING RWY 36R						CIRCLE-TO-LAND	
ILS			LOC (GS out)			Not Authorized at Night	
DA(H) 927' (200')			MDA(H) 1220' (493')			Max Kts	MDA(H)
FULL	TDZ or CL out	ALS out		ALS out			
A/B			RVR 24 or 1/2	RVR 50 or 1	90/120	1240'	(492') - 1
C	RVR 18 or 1/2	RVR 24 or 1/2	RVR 40 or 3/4	RVR 60 or 1 1/4	140	1260'	(512') - 1 1/2
D			RVR 50 or 1	1 1/2	165	1300'	(552') - 2

KCLT/CLT CHARLOTTE/DOUGLAS INTL 31 JAN 14 11-8A ILS Rwy 36R CAT II & III

BRIEFING STRIP™

D-ATIS	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
Arrival	Above 8000'		8000' & Below			Rwys 5-23 & 18L-36R	Rwy 18C-36C	Rwy 18R-36L	360°-179°	180°-359°
121.15	246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	118.1	126.4	133.35	121.9	121.8
LOC	Final	GS	CAT IIIC	CAT IIIB	CAT IIIA	CAT II ILS	Apt Elev	3800' MSA CLT VOR		
IBQC	Apch Crs	HAYOU 2500' (1773')	NA	Refer to	Minimums	RA 119'	748' TDZE 727'			
108.9	003°					DA(H)827'(100')				
MISSED APCH: Climb to 1200' then climbing RIGHT turn to 4000' via heading 080° and outbound on CLT VOR R-050 to EDDEL/D16.0 CLT and hold.										
Alt Set: INCHES			Trans level: FL 180			Trans alt: 18000'				
1. Special Aircrew & Acft Certification required. 2. DME or RADAR required.										
3. Simultaneous approach authorized with Rwys 36C/L. 4. VGSI and ILS glidepath not coincident.										



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	1200'	4000'	080°	CLT
GS	3.00°	372	478	531	637	743	PAPI	↑	RT	via	115.0
										hdg	R-050

STRAIGHT-IN LANDING RWY 36R			
CAT IIIC	CAT IIIB	CAT IIIA	CAT II ILS
NA	RVR 6	RVR 7	RA 119' DA(H) 827'(100')
			RVR 12

CHANGES: None.

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TERPS AMEND 11B 6 FEB 2014

CHARLOTTE, N CAR
RNAV (GPS) Y Rwy 5

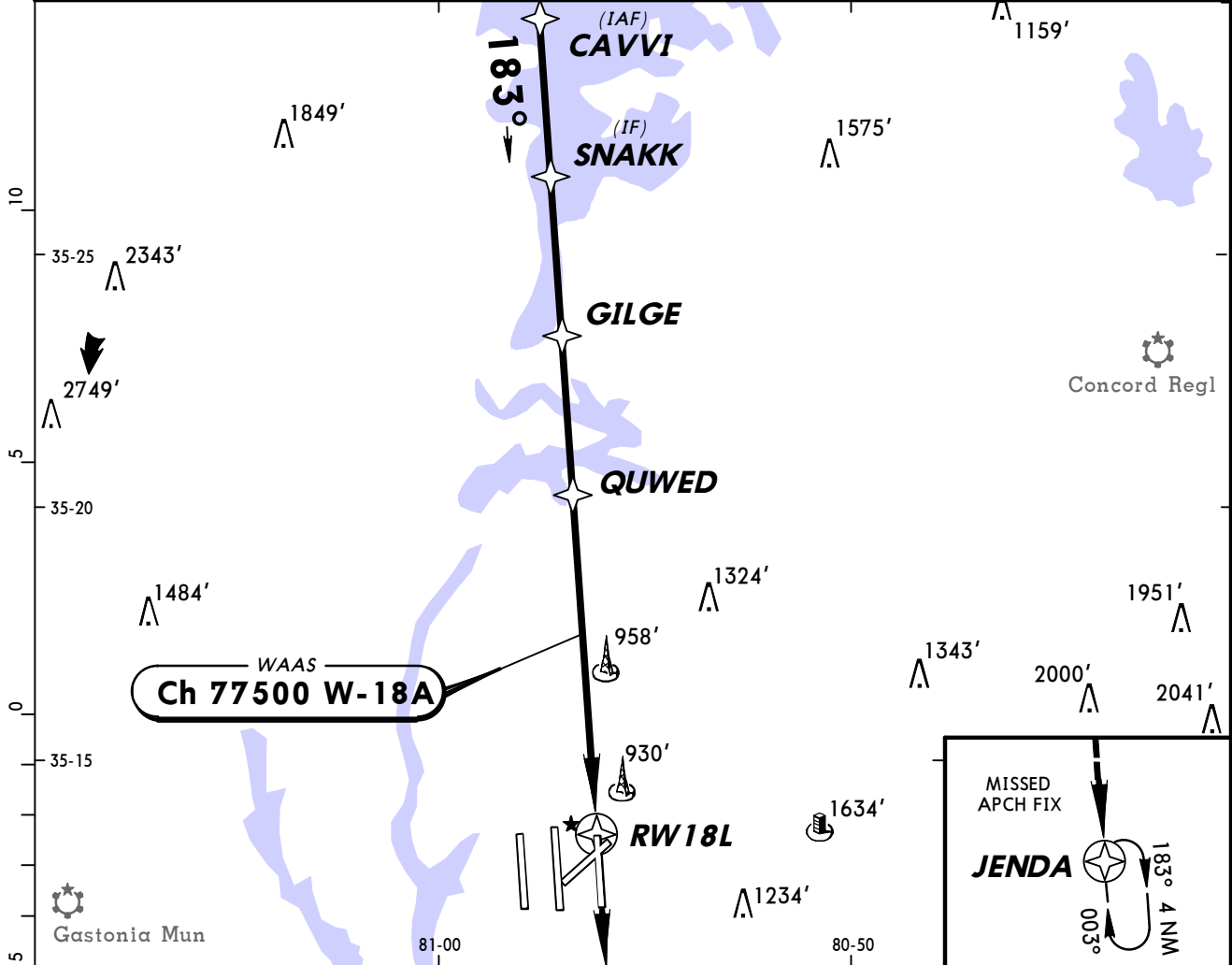
BRIEFING STRIP™

TERPS AMEND 3 11 FEB 2010

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BRIEFING STRIP

D-ATIS Arrival	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
	Above 8000'		8000' & Below			Rwys 5-23 & 18L-36R	Rwy 18C-36C	Rwy 18R-36L	360°-179° 180°-359°	
121.15	120.5	124.0	128.32	120.05	134.75	118.1	126.4	133.35	121.9 121.8	
WAAS Ch 77500 W-18A		Final Apch Crs 183°		Minimum Alt QUWED 3000' (2252')		LPV DA(H) 1083' (335')		Apt Elev 748' TDZE 748'		3800' MSA RW18L
MISSED APCH: Climb to 3000' direct JENDA and hold.										
Alt Set: INCHES										



CAVVI		SNAKK		GILGE		QUWED		RW18L		
6000' -183°		5000'		4000'		3000'		1.6 NM to RW18L		
3.2		3.2		3.2		5.2		0.3 0.4 0.9		
16.4		13.2		10.0		6.8		0		
Gnd speed-Kts		70	90	100	120	140	160	REIL VASI-R		3000'
Glide Path Angle 3.00°		372	478	531	637	743	849			JENDA
MAP at RW18L										

STRAIGHT-IN LANDING RWY 18L						CIRCLE-TO-LAND	
LPV		LNAV/VNAV		LNAV		DAY	NIGHT
DA(H) 1083' (335')		DA(H) 1222' (474')		MDA(H) 1260' (512')		Max Kts	
						90	1260' (512') - 1
						120	1260' (512') - 1 1/2
						140	1260' (512') - 1 1/2
						165	1300' (552') - 2

Not authorized during simultaneous operations.

CHANGES: Notes, minimums note.

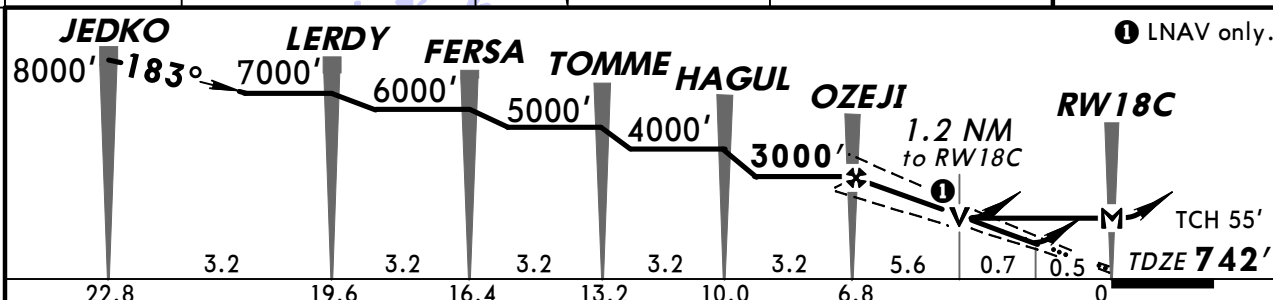
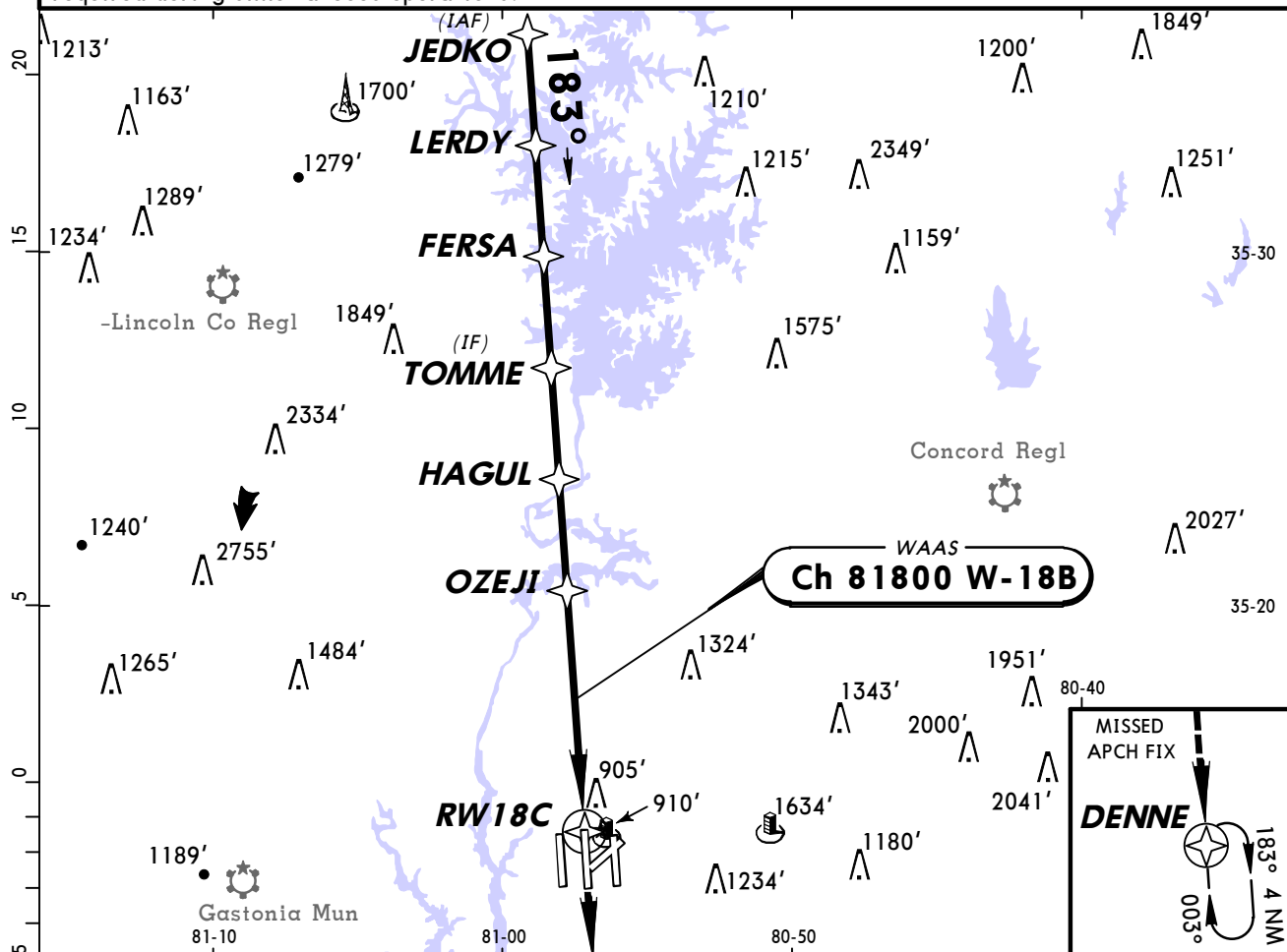
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TERPS AMEND 3A 8 MAR 2012

BRIEFING STRIP™	D-ATIS Arrival			CHARLOTTE Approach (R)			CHARLOTTE Tower			Ground	
	121.15			120.5			126.4			121.9	
	120.5			124.0			133.35			121.8	
	WAAS Ch 81800 W-18B			Final Apch Crs 183°			Minimum Alt OZEJI 3000' (2258')			LPV DA(H) 942' (200')	
							Apt Elev 748'			TDZE 742'	
										3800'	
										MSA RW18C	

MISSED APCH: Climb to 3000' direct DENNE and hold.

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'
 1. Radar required. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 4. VGSI and RNAV glidepath not coincident. 5. Simultaneous approach authorized with ILS or LOC Rwy 18L, ILS or LOC Rwy 18R ILS Rwy 18R Cat II & III. 6. Use of Flight Director or Autopilot providing RNAV track guidance required during simultaneous operations.



Gnd speed-Kts	70	90	100	120	140	160	MALSR		3000'		DENNE	
Glide Path Angle 3.00°	372	478	531	637	743	849	PAPI					
MAP at RW18C												

STRAIGHT-IN LANDING RWY 18C							CIRCLE-TO-LAND		
LPV 942' (200')			LNAV/VNAV 1192' (450')			LNAV 1200' (458')			
DA(H)			DA(H)			MDA(H)			
RAIL or ALS out			RAIL or ALS out			RAIL out ALS out			
A						RVR 24	RVR 40	RVR 50	Max Kts
B	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	1 1/2		or 1/2	or 3/4	or 1	90
C						RVR 40 or 3/4	RVR 60 or 1 1/4		120
D						RVR 50 or 1	1 1/2		140
							DAY		NIGHT
							MDA(H)		
							1240' (492') - 1		
							1260' (512') - 1 1/2		NA
							1300' (552') - 2		

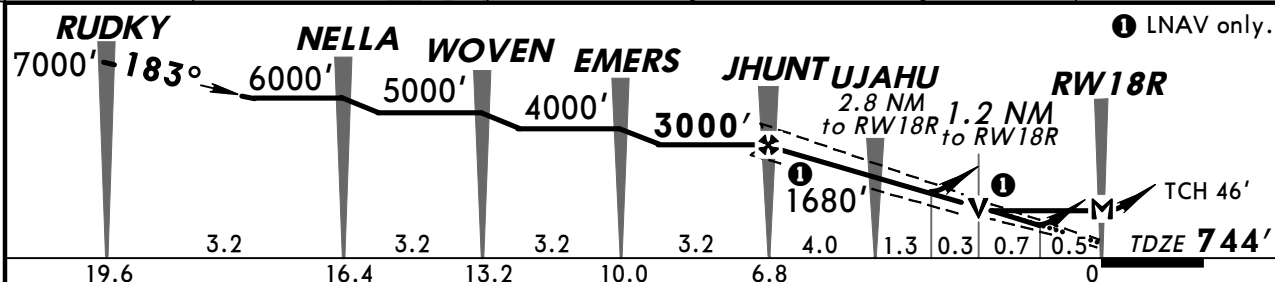
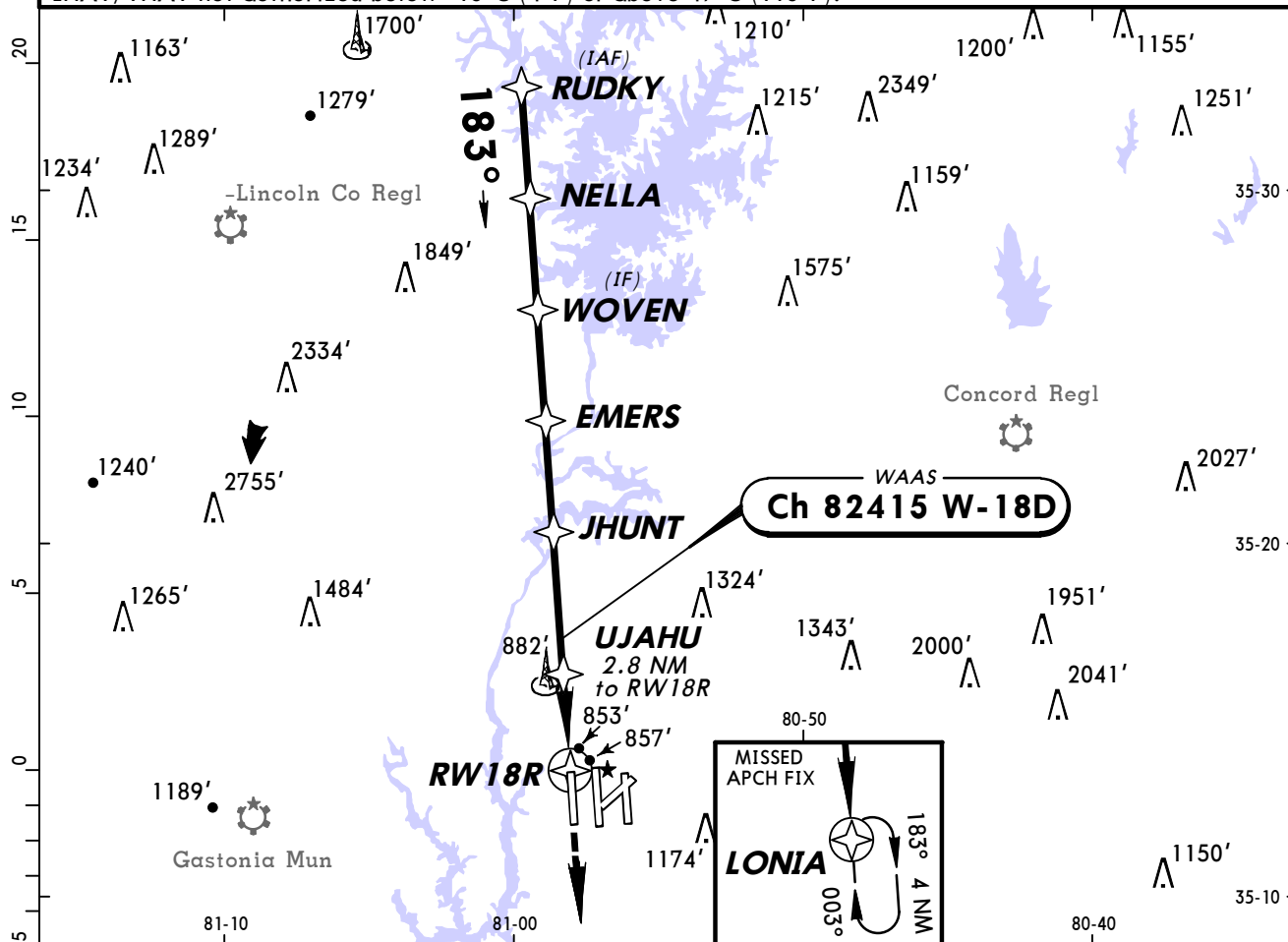
1 Not authorized during simultaneous operations.

CHANGES: Notes.

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BRIEFING STRIP™	D-ATIS Arrival	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
		Above 8000'		8000' & Below			Rwy	Rwys 5-23	Rwy	360°-179°	180°-359°
		246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	18R-36L	& 18L-36R	18C-36C		
	121.15	120.5	124.0	128.32	120.05	134.75	133.35	118.1	126.4	121.9	121.8
	WAAS Ch 82415 W-18D		Final Apch Crs 183°		Minimum Alt JHUNT 3000' (2256')		LPV DA(H) 944' (200')		Apt Elev 748' TDZE 744'		3800' <i>MSA RW18R</i>
MISSED APCH: Climb to 3000' direct LONIA and hold.											

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'
 1. **RADAR required.** 2. Use of Flight Director or Autopilot providing RNAV track guidance required during simultaneous operations. 3. Simultaneous approach authorized with ILS or LOC Rwy 18L. 4. DME/DME RNP-0.30 not authorized. 5. For uncompensated Baro-VNAV Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F).



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	3000'	PAPI	3000'	D	LONIA
Glide Path Angle 3.00°	372	478	531	637	743	849						
MAP at RW18R												

STRAIGHT-IN LANDING RWY 18R						CIRCLE-TO-LAND	
LPV		LNAV/VNAV		1 LNAV		DAY	NIGHT
DA(H) 944' (200')		DA(H) 1262' (518')		MDA(H) 1160' (416')		Max Kts	
ALS out		ALS out		ALS out		90	1240' (492') - 1
RVR 24 or 1/2		RVR 60 or 1 1/4		RVR 24 or 1/2		120	1260' (512') - 1 1/2
RVR 40 or 3/4		RVR 1 3/4		RVR 40 or 3/4		140	1300' (552') - 2
RVR 50 or 1				RVR 50 or 1		165	

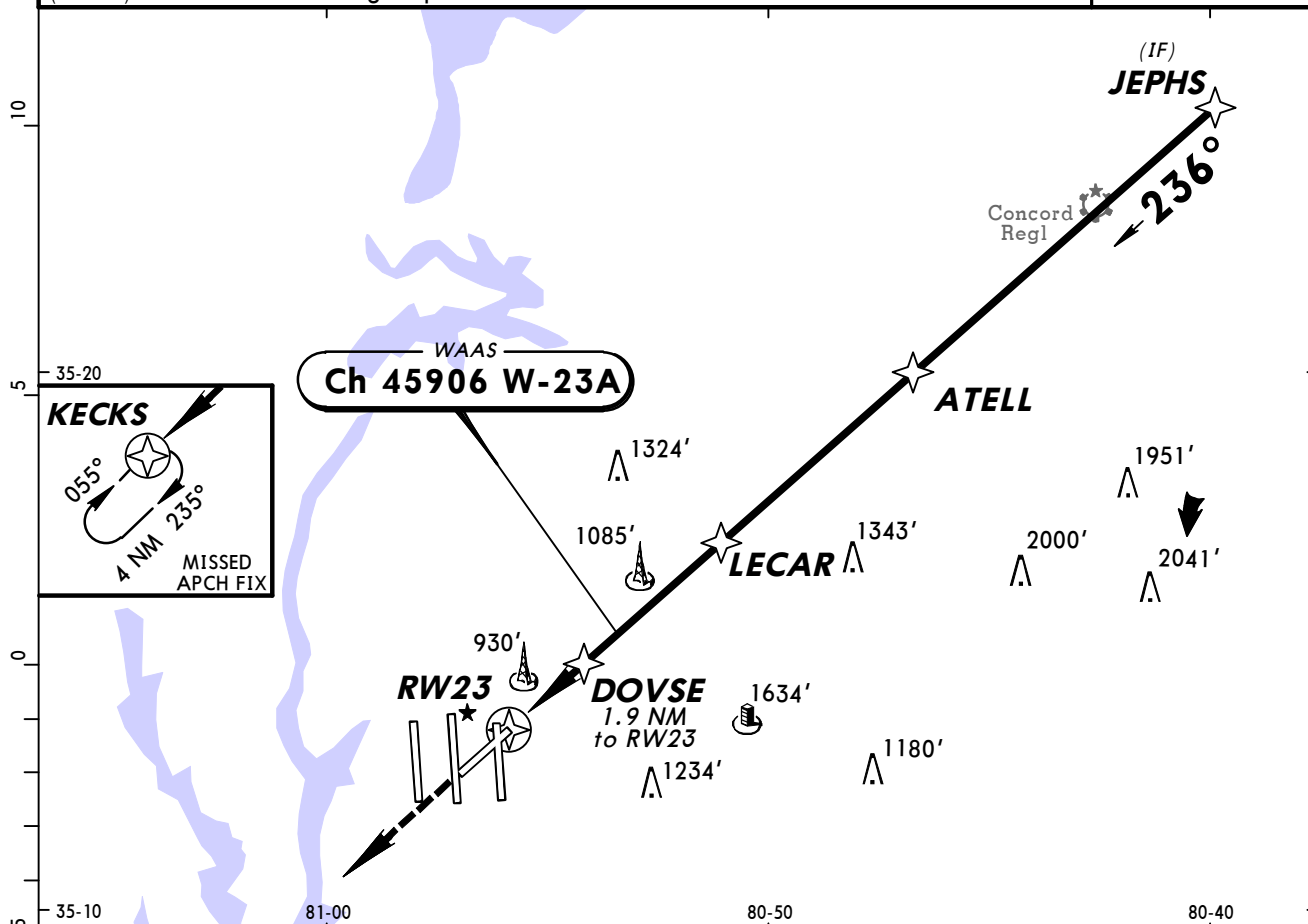
1 Not authorized during simultaneous operations.

CHANGES: None.

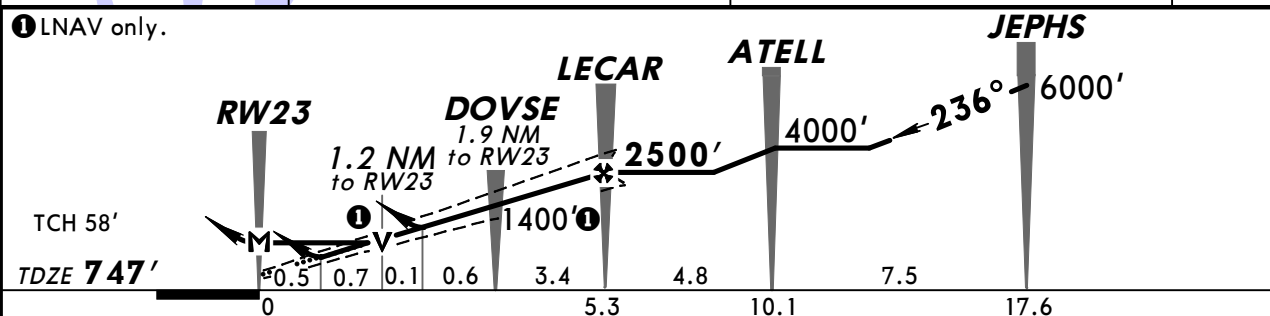
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BRIEFING STRIP™

D-ATIS		CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
Arrival	Above 8000'		8000' & Below				Rwys 5-23 & 18L-36R	Rwy 18C-36C	Rwy 18R-36L	360°-179° 180°-359°	
121.15	120.5	124.0	128.32	120.05	134.75		118.1	126.4	133.35	121.9	121.8
WAAS Ch 45906 W-23A		Final Apch Crs 236°		Minimum Alt LECAR 2500' (1753')		LPV DA(H) 947' (200')		Apt Elev 748' TDZE 747'		3800' MSA RW23	
MISSED APCH: Climb to 4000' direct KECKS and hold, continue climb-in-hold to 4000'.											
Alt Set: INCHES											



① LNAV only.



Gnd speed-Kts	70	90	100	120	140	160	REIL VASI-R		4000'	→ D →	KECKS
Glide Path Angle	3.00°	372	478	531	637	743					
MAP at RW23											

STRAIGHT-IN LANDING RWY 23						CIRCLE-TO-LAND	
LPV DA(H) 947' (200')		LNAV/VNAV DA(H) 1222' (475')		LNAV MDA(H) 1180' (433')		DAY	NIGHT
A	RVR 40 or 3/4	1 3/4		RVR 50 or 1	140	1240' (492') - 1	NA
						1260' (512') - 1 1/2	
						1300' (552') - 2	

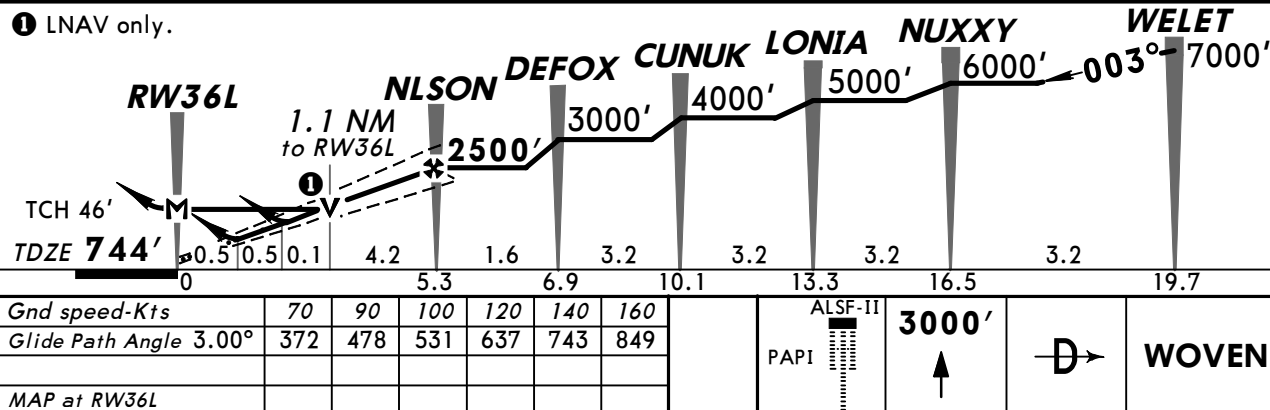
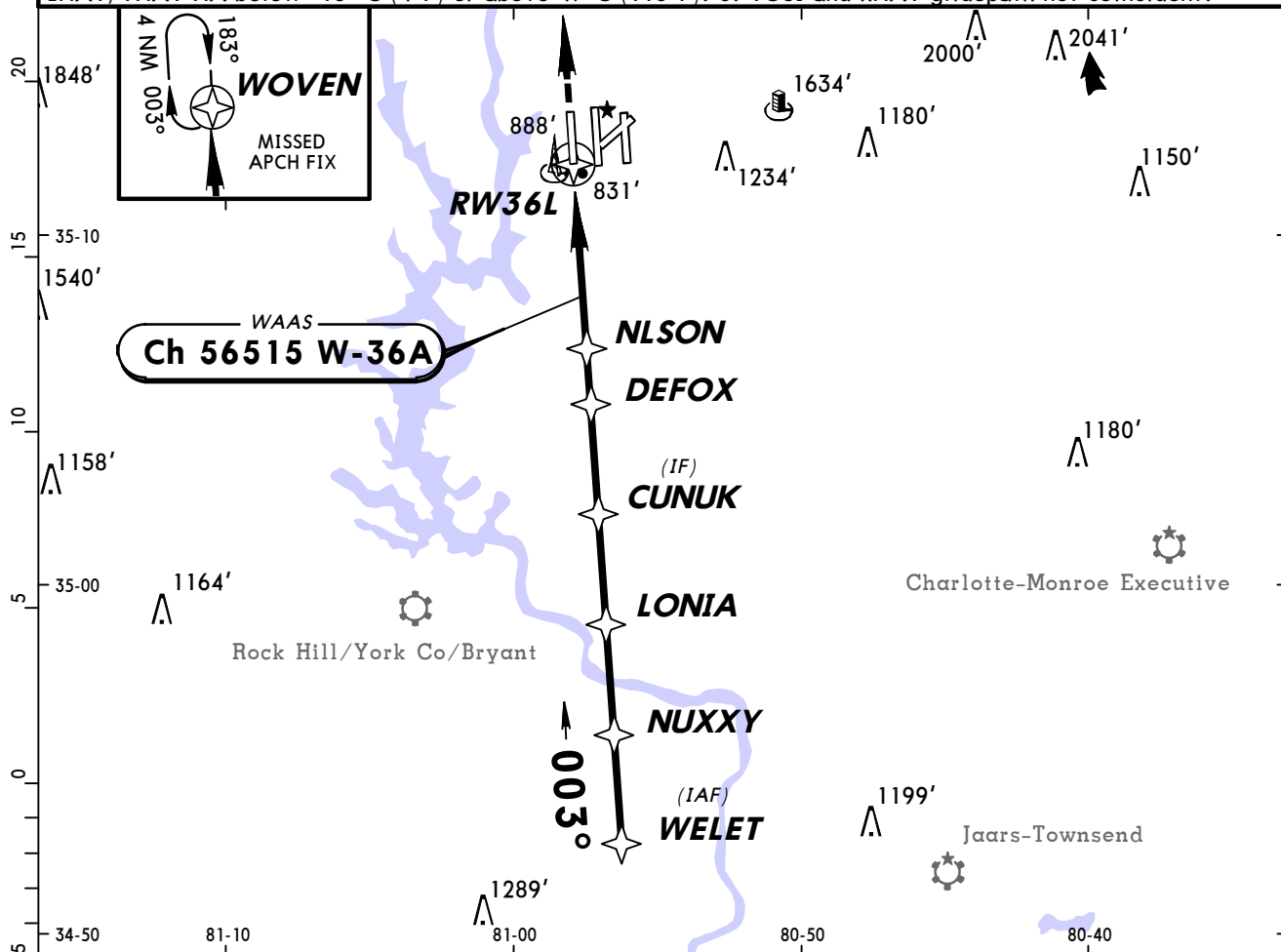
TERPS AMEND 1 11 FEB 2010

CHANGES: None.

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BRIEFING STRIP™	D-ATIS Arrival	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
		Above 8000'		8000' & Below			Rwy	Rwys 5-23	Rwy	360°-179° 180°-359°	
		246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	18R-36L	& 18L-36R	18C-36C		
	121.15	120.5	124.0	128.32	120.05	134.75	133.35	118.1	126.4	121.9	121.8
	WAAS Ch 56515 W-36A		Final Apch Crs 003°		Minimum Alt NLSON 2500' (1756')		LPV DA(H) 944' (200')		Apt Elev 748' TDZE 744'		3800' MSA RW36L
MISSED APCH: Climb to 3000' direct WOVEN and hold.											

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'
 1. Radar required. 2. Use of Flight Director or Autopilot providing RNAV track guidance required during simultaneous operations. 3. Simultaneous approach authorized with ILS or LOC Rwy 36R, ILS Rwy 36R Cat II & III. 4. DME/DME RNP-0.30 NA. 5. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16° C (4°F) or above 47°C (116°F). 6. VGSI and RNAV glidepath not coincident.



STRAIGHT-IN LANDING RWY 36L						CIRCLE-TO-LAND	
LPV DA(H) 944' (200')		LNAV/VNAV DA(H) 1113' (369')		① LNAV MDA(H) 1140' (396')		DAY	NIGHT
ALS out		ALS out		ALS out		MDA(H)	
A						90	NA
B				RVR 24 or 1/2	RVR 50 or 1	120	
C	RVR 24 or 1/2	RVR 40 or 3/4	RVR 40 or 3/4	1 1/4		140	
D				RVR 50 or 1	RVR 60 or 1 1/4	165	

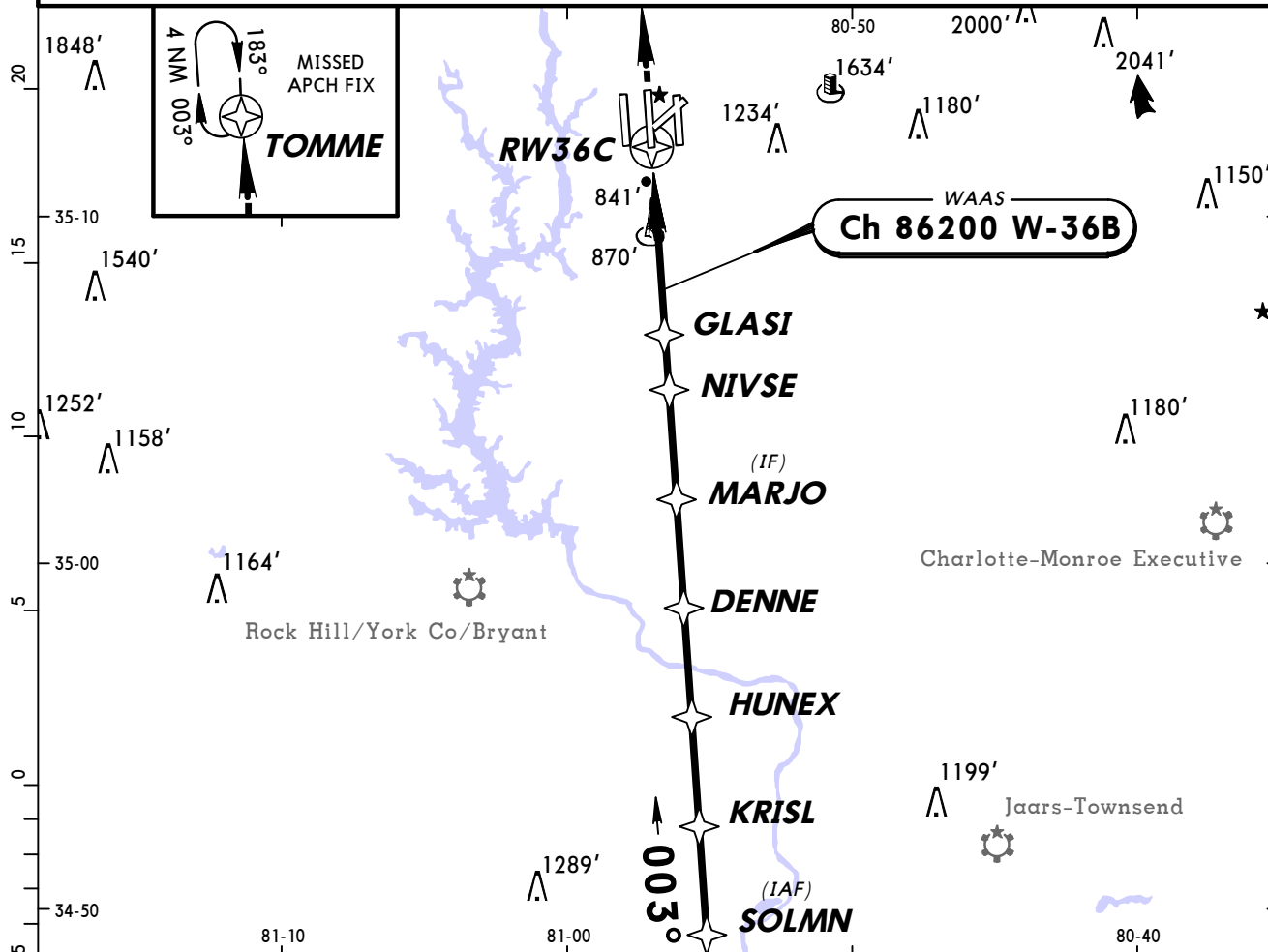
① Not authorized during simultaneous operations.

CHANGES: Notes, minimums.

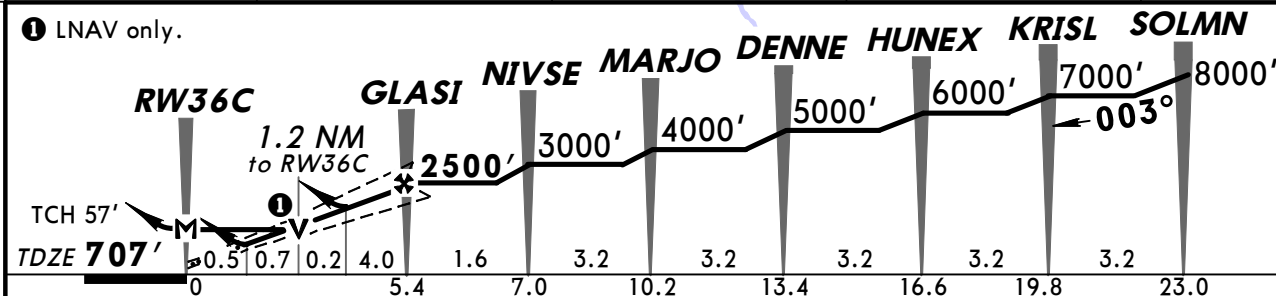
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BRIEFING STRIP™

D-ATIS	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
Arrival	Above 8000'		8000' & Below			Rwy	Rwys 5-23 & 18L-36R	Rwy	360°-179° 180°-359°	
	246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	18C-36C		18R-36L		
121.15	120.5	124.0	128.32	120.05	134.75	126.4	118.1	133.35	121.9 121.8	
WAAS Ch 86200 W-36B		Final Apch Crs 003°		Minimum Alt GLASI 2500' (1793')		LPV DA(H) 907' (200')		Apt Elev 748' TDZE 707'		3800'
MISSED APCH: Climb to 3000' direct TOMME and hold.									MSA RW36C	
Alt Set: INCHES			Trans level: FL 180				Trans alt: 18000'			
1. Radar required. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 4. VGSI and RNAV glidepath not coincident. 5. Simultaneous approach authorized with ILS or LOC Rwy 36L, ILS Rwy 36L Cat II & III, ILS or LOC Rwy 36R, ILS or LOC Rwy 36R Cat II & III. 6. Use of Flight Director or Autopilot providing RNAV track guidance required during simultaneous operations.										



① LNAV only.



Gnd speed-Kts	70	90	100	120	140	160	ALSIF-II	3000'	D	TOMME
Glide Path Angle 3.00°	372	478	531	637	743	849	PAPI			
MAP at RW36C										

STRAIGHT-IN LANDING RWY 36C				CIRCLE-TO-LAND			
LPV		LNAV/VNAV		① LNAV		DAY	NIGHT
DA(H) 907' (200')		DA(H) 1182' (475')		MDA(H) 1140' (433')		MDA(H)	
ALS out		ALS out		ALS out		Max Kts	
A						90	1240' (492') - 1
B	RVR 24 or 1/2	RVR 40 or 3/4	RVR 60 or 1/4	1 3/4	RVR 24 or 1/2	120	1260' (512') - 1 1/2
C					RVR 40 or 3/4	140	1300' (552') - 2
D					RVR 50 or 1	165	

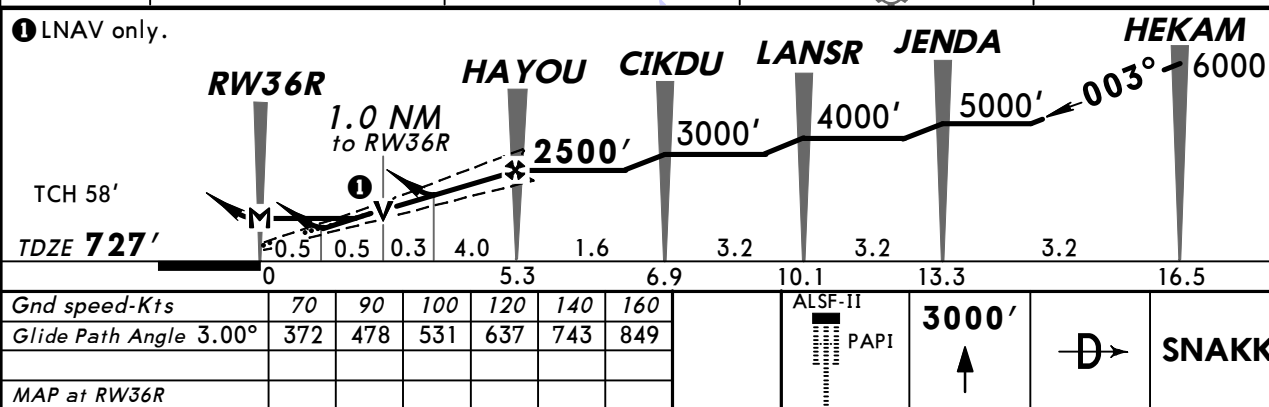
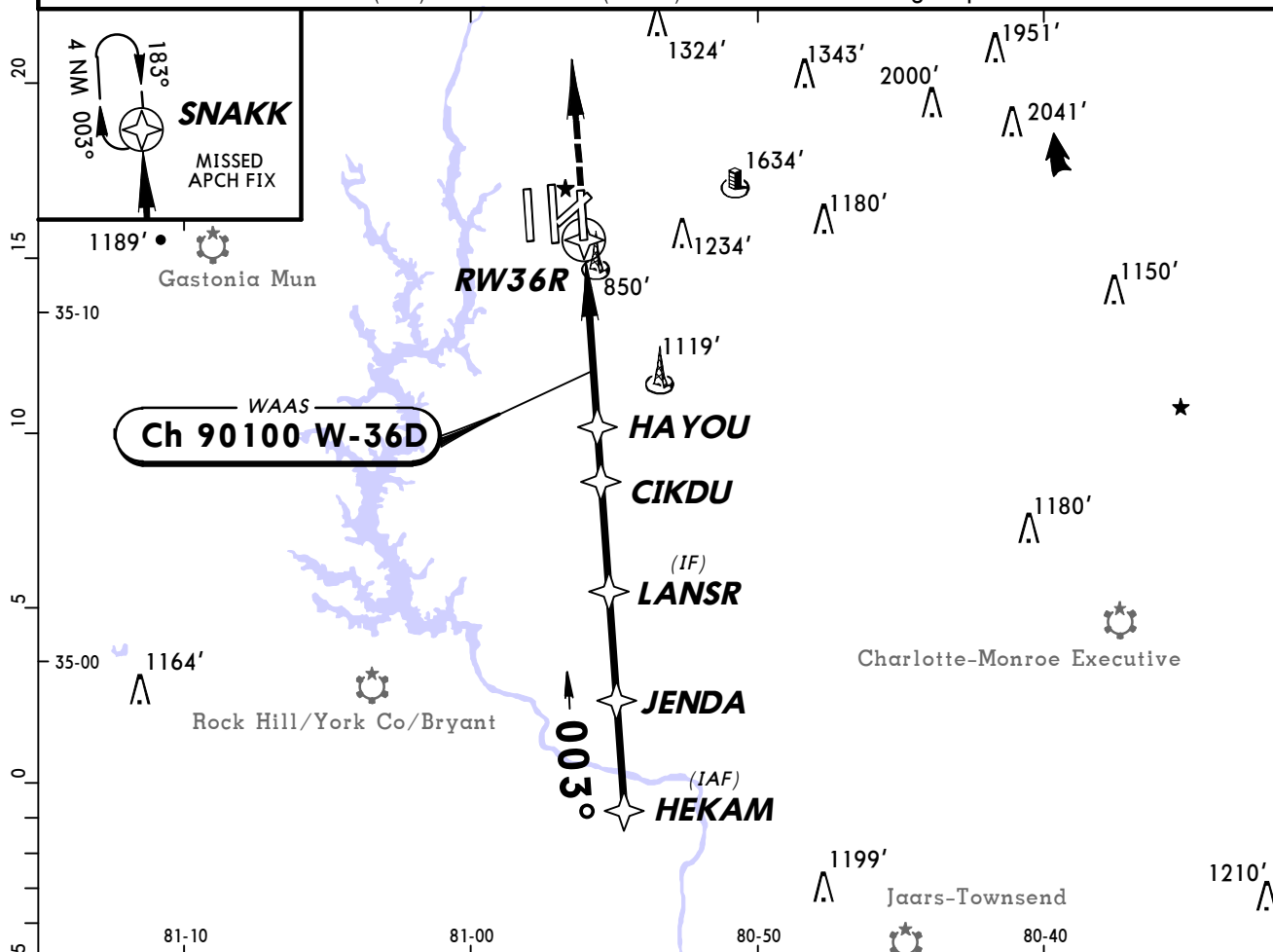
① Not authorized during simultaneous operations.

CHANGES: Notes.

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BRIEFING STRIP™	D-ATIS	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
	Arrival	Above 8000'		8000' & Below			Rwys 5-23 & 18L-36R	Rwy 18C-36C	Rwy 18R-36L	360°-179°	180°-359°
		246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°					
	121.15	120.5	124.0	128.32	120.05	134.75	118.1	126.4	133.35	121.9	121.8
	WAAS Ch 90100 W-36D		Final Apch Crs 003°		Minimum Alt HAYOU 2500' (1773')		LPV DA(H) 927' (200')		Apt Elev 748' TDZE 727'		3800' MSA RW36R
MISSED APCH: Climb to 3000' direct SNAKK and hold.											

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'
 1. Radar required. 2. Use of Flight Director or Autopilot providing RNAV track guidance required during simultaneous operations. 3. Simultaneous approach authorized with ILS or LOC Rwy 36L, ILS Rwy 36L Cat II & III. 4. DME/DME RNP-0.30 not authorized. 5. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16° C (4°F) or above 47°C (116°F). 6. VGSI and RNAV glidepath not coincident.



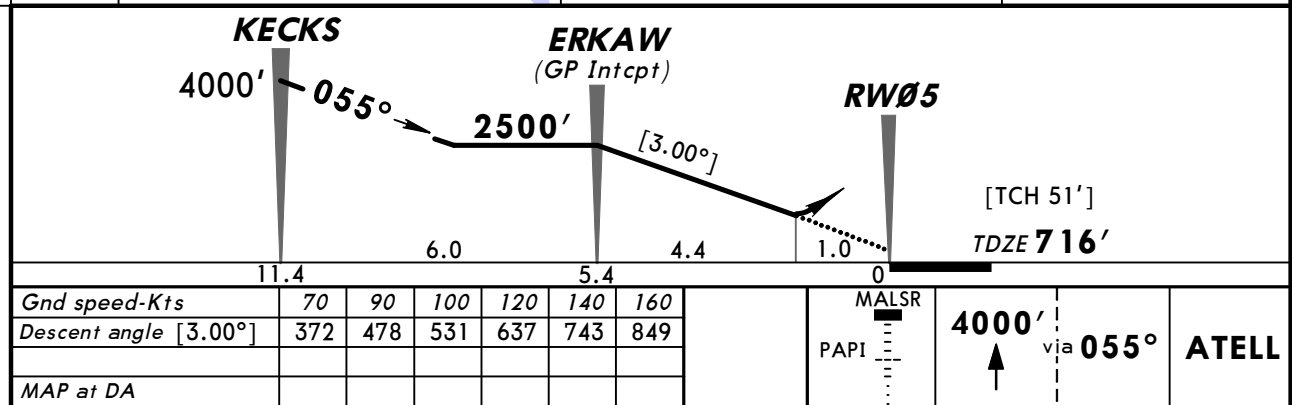
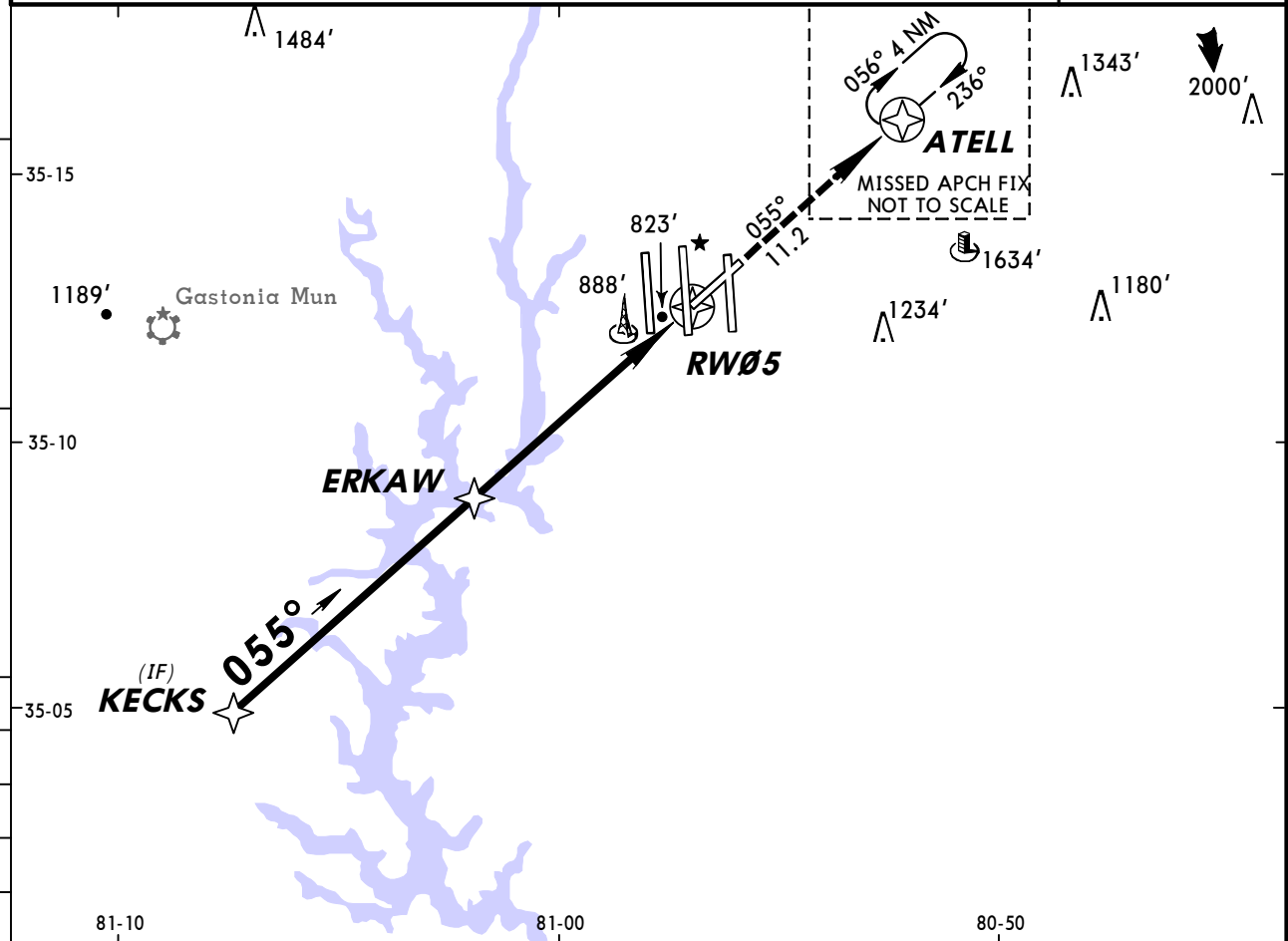
STRAIGHT-IN LANDING RWY 36R						CIRCLE-TO-LAND		
LPV DA(H) 927' (200')		LNAV/VNAV DA(H) 1190' (463')		① LNAV MDA(H) 1120' (393')		DAY	NIGHT	
ALS out		ALS out		ALS out		Max Kts	MDA(H)	
A						90	1240' (492') - 1	
B				RVR 24 or 1/2		120	1260' (512') - 1 1/2	
C		RVR 40 or 3/4		RVR 50 or 1		140	1300' (552') - 2	
D				RVR 50 or 1		165		

① Not authorized during simultaneous operations.

CHANGES: None.

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D-ATIS		CHARLOTTE Approach (R)				CHARLOTTE Tower			Ground	
Arrival	Above 8000'	8000' & Below				Rwys 5-23 & 18L-36R	Rwy 18C-36C	Rwy 18R-36L	360°-179° 180°-359°	
121.15	246°- 074° 075°- 245°	001°- 119° 120°- 245°	246°- 360°			118.1	126.4	133.35	121.9	121.8
RNAV		Final Apch Crs 055°	Minimum Alt ERKAW 2500' (1784')	RNP 0.11 DA(H) 1061' (345')		Apt Elev 748' TDZE 716'			3900' MSA RW05	
MISSED APCH: Climb to 4000' via track 055° to ATELL and hold, continue climb-in-hold to 4000'										
Alt Set: INCHES										



STRAIGHT-IN LANDING RWY 5			
RNP 0.11		RNP 0.30	
DA(H) 1061' (345')		DA(H) 1216' (500')	
RAIL or ALS out		RAIL or ALS out	
A			
B			
C	RVR 40 or 3/4	RVR 60 or 1 1/4	1 3/4
D			

D-ATIS Arrival	CHARLOTTE Approach (R)				CHARLOTTE Tower			Ground
	Above 8000'	8000' & Below			Rwys 5-23 & 18L-36R	Rwy 18C-36C	Rwy 18R-36L	360°-179° 180°-359°
121.15	246°-074° 120.5	075°-245° 124.0	001°-119° 128.32	120°-245° 120.05	246°-360° 134.75	118.1	126.4 133.35	121.9 121.8
RNAV	Final Apch Crs 183°	Minimum Alt QUWED 3000' (2252')	RNP 0.11 DA(H) 1091' (343')	Apt Elev 748'	TDZE 748'	3900'		

MISSED APCH: Climb to 3000' via track 183° to JENDA and hold.

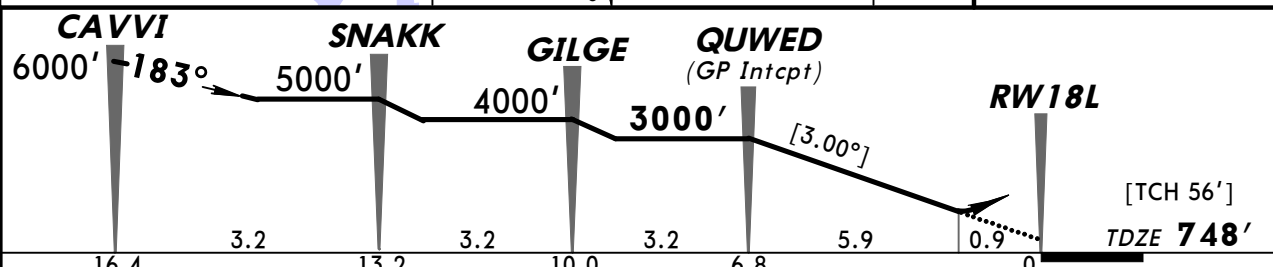
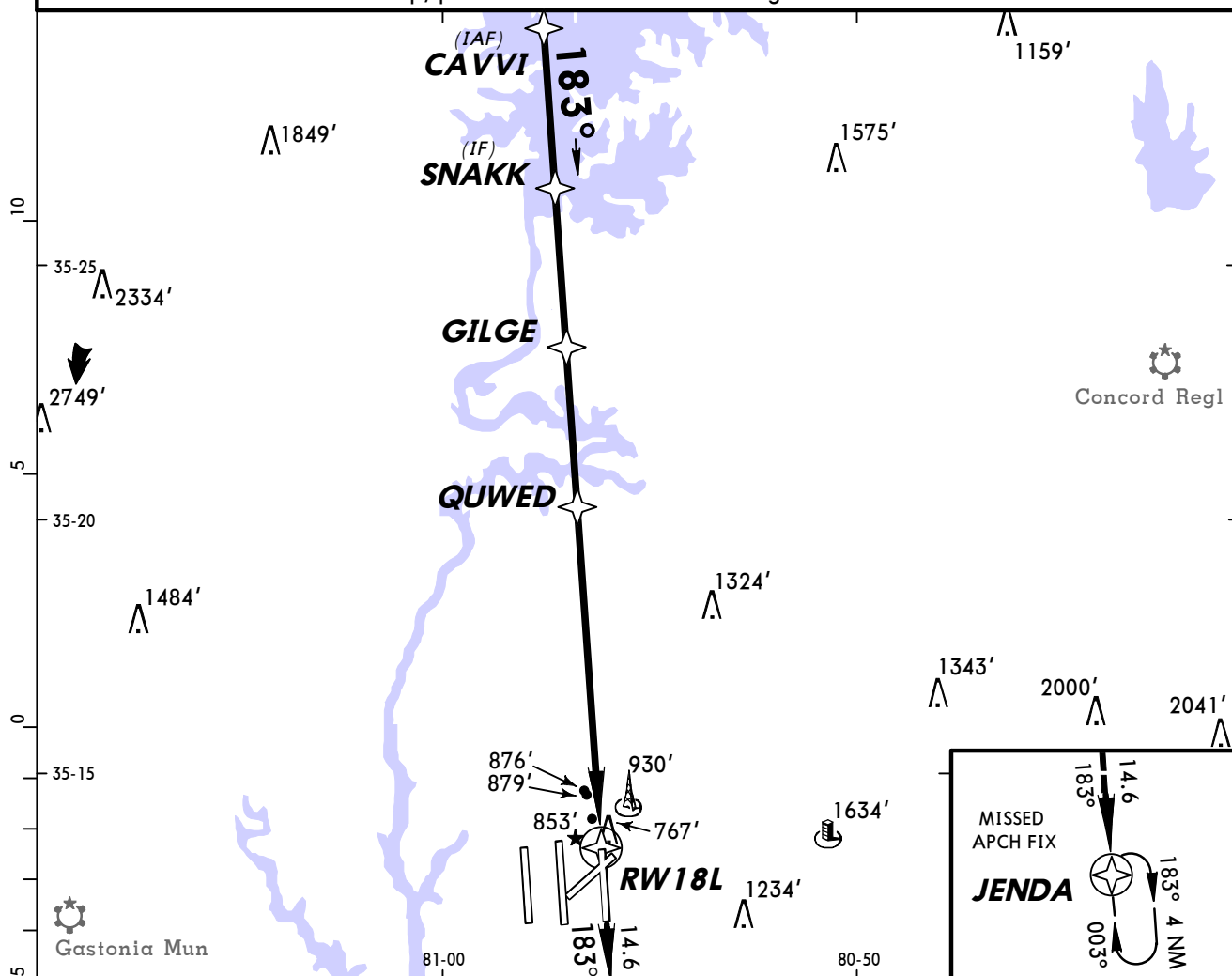
MSA RW18L

Alt Set: INCHES

Trans level: FL 180

Trans alt: 18000'

1. AUTHORIZATION REQUIRED. 2. GPS required. 3. RADAR required. 4. Use of Flight Director or Autopilot providing RNAV track guidance required during simultaneous operations. 5. Simultaneous approach authorized with ILS or LOC Rwy 18R, ILS Rwy 18R Cat. II & III. 6. For uncompensated Baro-VNAV systems, procedure not authorized below -10°C (14°F) or above 47°C (118°F). 7. VGSI and RNAV glidepath not coincident. 8. When VGSI inop, procedure not authorized at night.



Gnd speed-Kts	70	90	100	120	140	160	REIL VASI-R		3000'	via 183°	JENDA
Descent angle [3.00°]	372	478	531	637	743	849					
MAP at DA											

STRAIGHT-IN LANDING RWY 18L

RNP 0.11

DA(H) 1091' (343')

RNP 0.30

DA(H) 1202' (454')

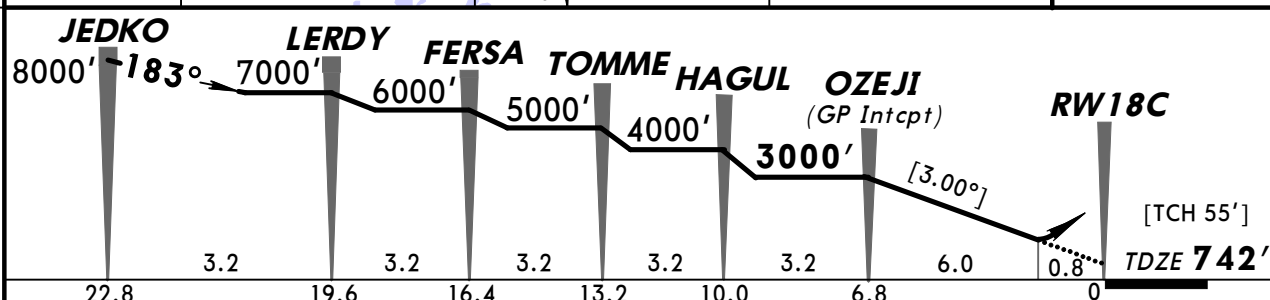
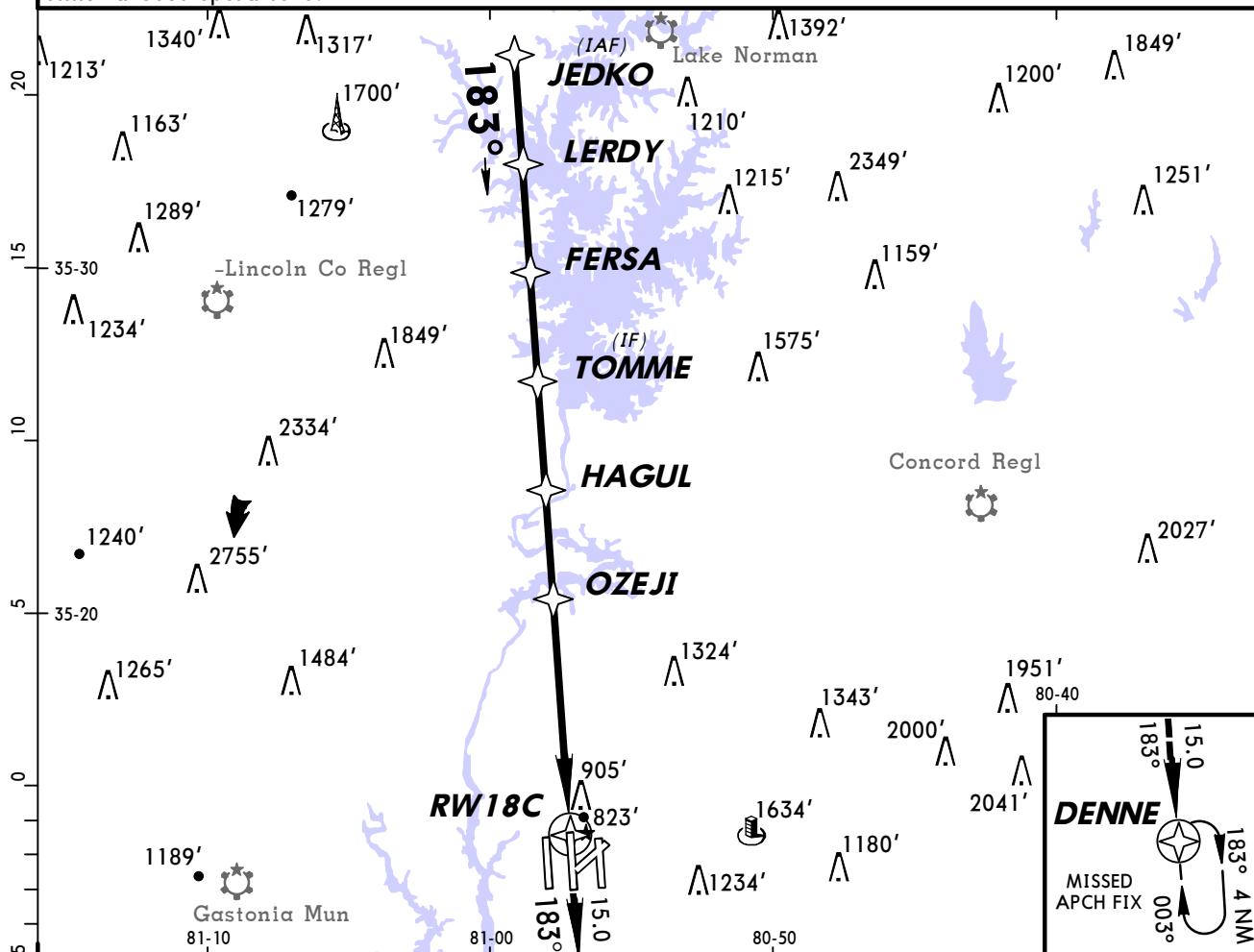
A		
B	RVR 60 or 1 1/4	1 1/2
C		
D		

ING STRIP™

D-ATIS Arrival	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
	Above 8000'		8000' & Below			Rwy	Rwys 5-23 & 18L-36R	Rwy	360°-179°	180°-359°
	246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	18C-36C		18R-36L		
121.15	120.5	124.0	128.32	120.05	134.75	126.4	118.1	133.35	121.9	121.8
RNAV		Final Apch Crs 183°		Minimum Alt OZEJI 3000' (2258')		RNP 0.11 DA(H) 1054' (312')		Apt Elev 748' TDZE 742'		3900'
MISSED APCH: Climb to 3000' on track 183° to DENNE and hold.									MSA RW18C	

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

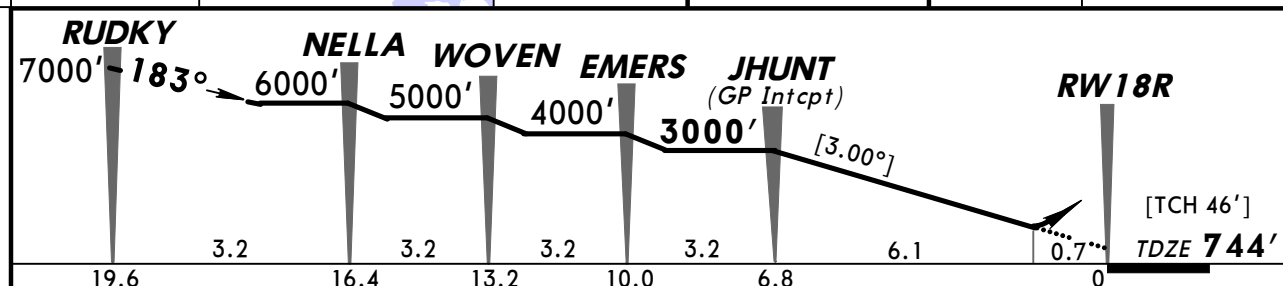
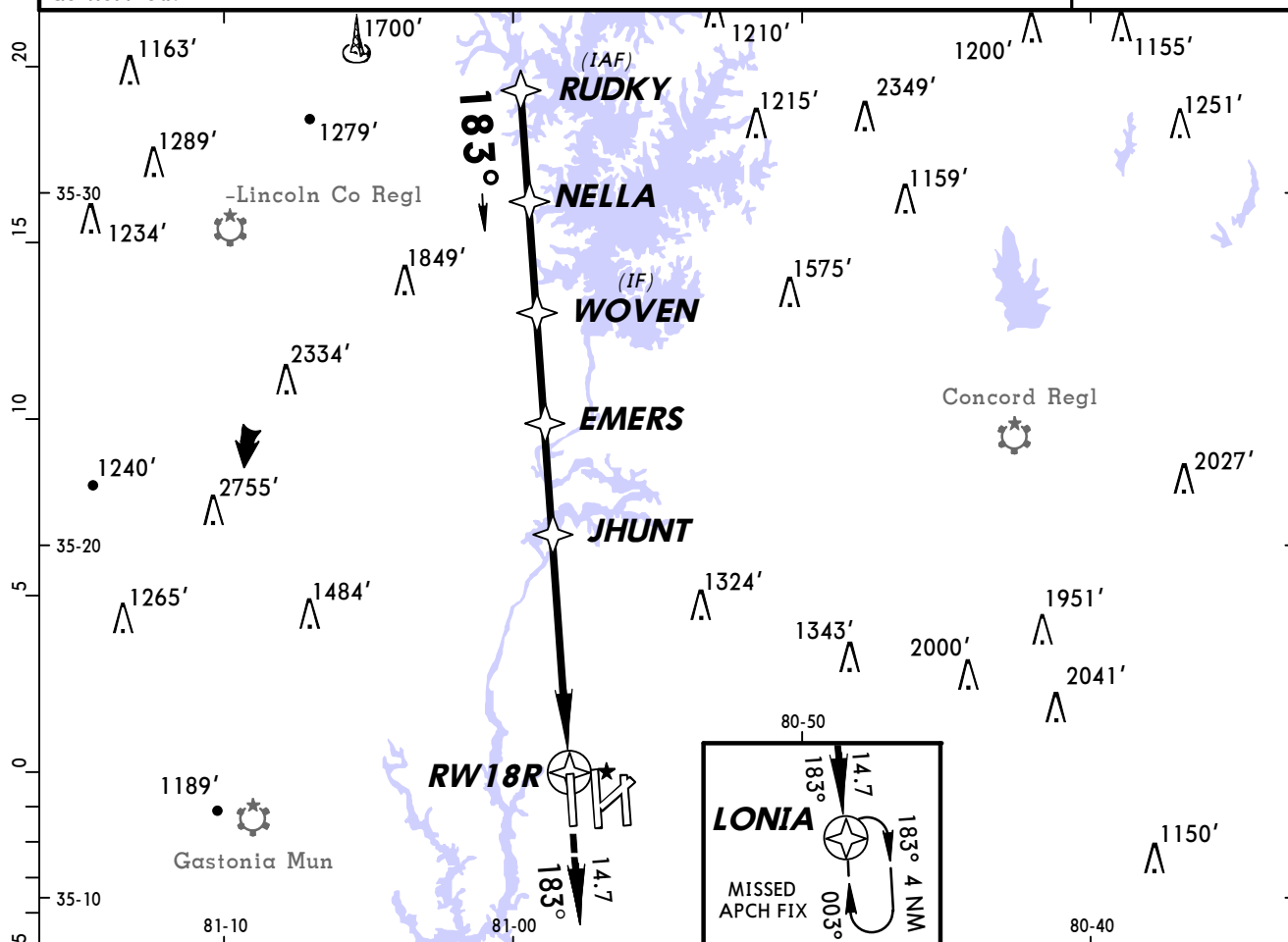
1. AUTHORIZATION REQUIRED. 2. GPS required. 3. RADAR required. 4. For uncompensated Baro-VNAV systems, procedure not authorized below -10°C (14°F) or above 47°C (117°F). 5. VGSI and RNAV glidepath not coincident. 6. Simultaneous approach authorized with ILS or LOC Rwy 18L, ILS or LOC Rwy 18R, ILS Rwy 18R Cat II & III. 7. Use of Flight Director or Autopilot providing RNAV track guidance required during simultaneous operations.



Gnd speed-Kts	70	90	100	120	140	160
Descent angle [3.00°]	372	478	531	637	743	849
MAP at DA						

STRAIGHT-IN LANDING RWY 18C			
RNP 0.11 DA(H) 1054' (312')	RAIL or ALS out		RNP 0.30 DA(H) 1175' (433')
			RAIL or ALS out
A			
B			
C	RVR 40 or 3/4	RVR 50 or 1	RVR 50 or 1
D			1 1/2

D-ATIS Arrival	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
	Above 8000'		8000' & Below			Rwy 18R-36L	Rwys 5-23 & 18L-36R	Rwy 18C-36C	360°-179°	180°-359°
121.15	120.5	124.0	128.32	120.05	134.75	133.35	118.1	126.4	121.9	121.8
RNAV	Final Apch Crs 183°	Minimum Alt JHUNT 3000' (2256')	RNP 0.11 DA(H) 1026' (282')		Apt Elev 748' TDZE 744'		3900' MSA RW18R			
MISSED APCH: Climb to 3000' via track 183° to LONIA and hold.										
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'										
1. AUTHORIZATION REQUIRED. 2. GPS required. 3. RADAR required. 4. Use of Flight Director or Autopilot providing RNAV track guidance required during simultaneous operations. 5. Simultaneous approach authorized with ILS or LOC Rwy 18L. 6. For uncompensated Baro-VNAV systems, procedure not authorized below -10°C (14°F) or above 47°C (118°F). 7. Visibility reduction by helicopters not authorized.										

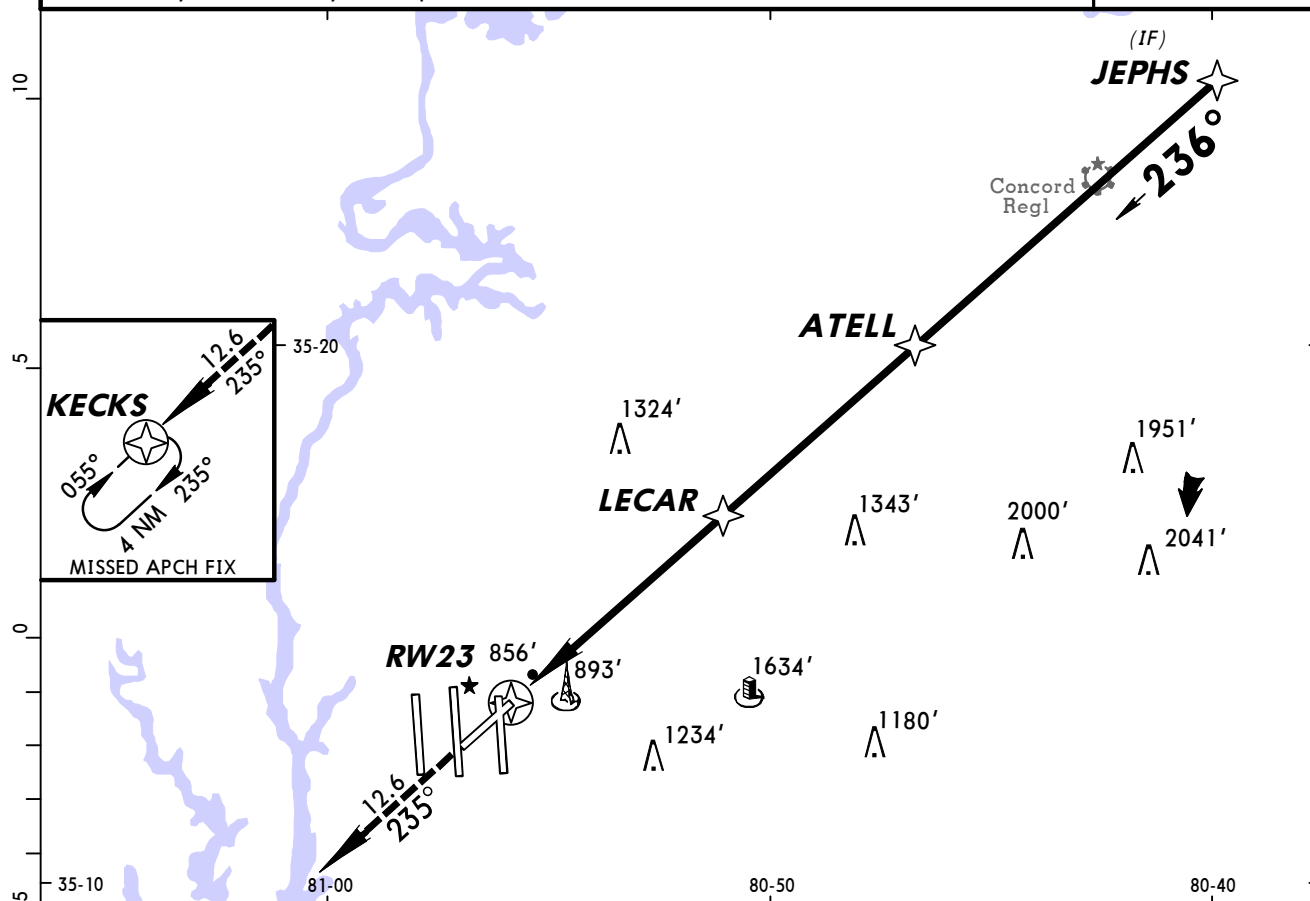


Gnd speed-Kts	70	90	100	120	140	160	ALSF-II <
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STRAIGHT-IN LANDING RWY 18R			
RNP 0.11		RNP 0.30	
DA(H) 1026' (282')		DA(H) 1085' (341')	
ALS out		ALS out	
A			
B			
C	RVR 24 or 1/2	RVR 50 or 1	RVR 40 or 3/4
D			RVR 60 or 1 1/4

BRIEFING STRIP™

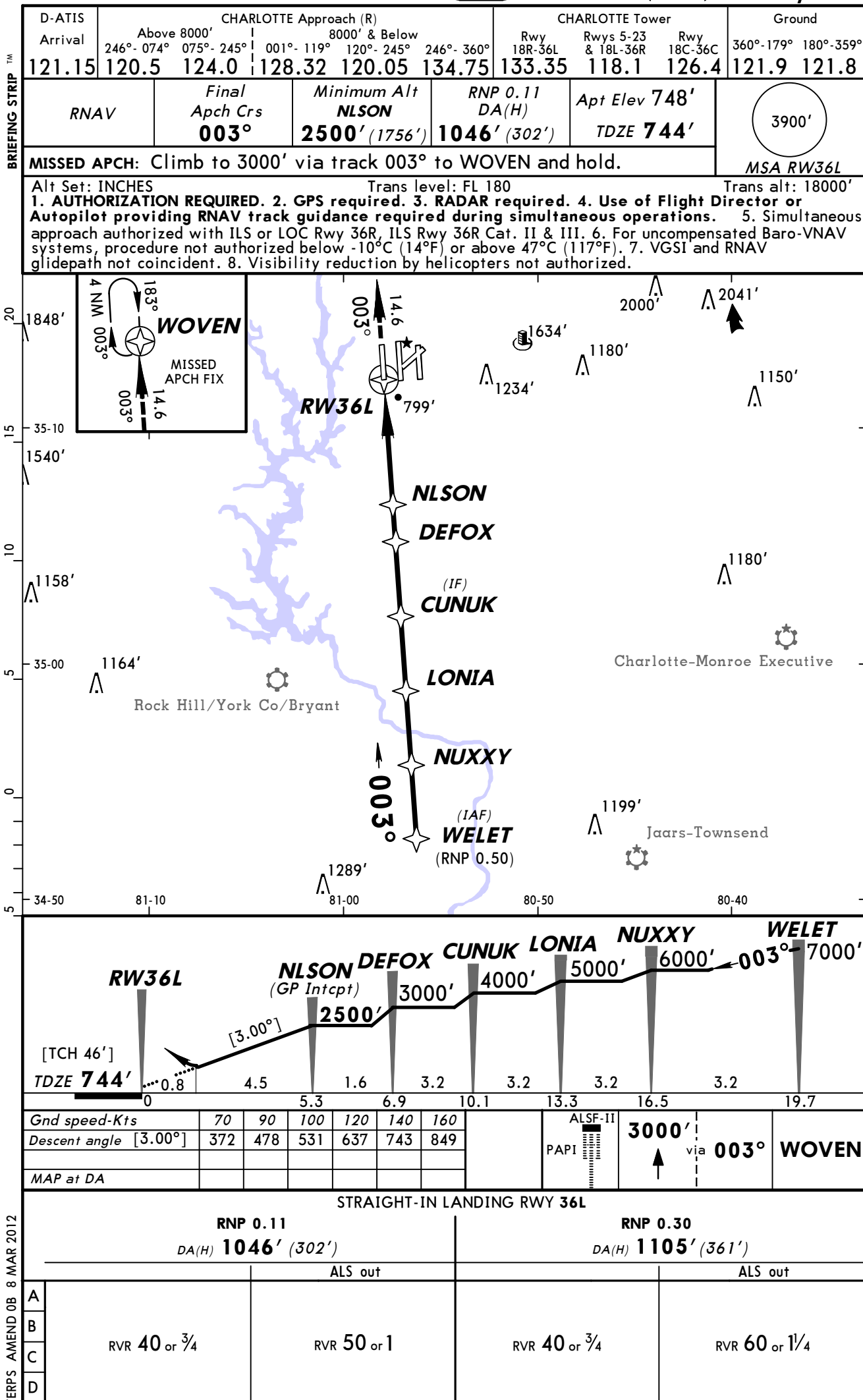
D-ATIS Arrival	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground	
	Above 8000'		8000' & Below			Rwys 5-23 & 18L-36R	Rwy 18C-36C	Rwy 18R-36L	360°-179°	180°-359°
121.15	246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	118.1	126.4	133.35	121.9	121.8
RNAV	Final Apch Crs 236°		Minimum Alt LECAR 2500' (1753')		RNP 0.11 DA(H) 1091' (344')	Apt Elev 748' TDZE 747'			3900' MSA RW23	
MISSED APCH: Climb to 4000' via track 235° to KECKS and hold, continue climb-in-hold to 4000'.										
Alt Set: INCHES										



RW23 TDZE 747' [TCH 58'] LECAR (GP Intcpt) 2500' 4000' JEPHS									
--	--	--	--	--	--	--	--	--	--

STRAIGHT-IN LANDING RWY 23							
RNP 0.11 DA(H) 1091' (344')				RNP 0.30 DA(H) 1219' (472')			
A	RVR 60 or 1¼			1½			
B							
C							
D							

TERPS AMEND 0A 28 JUL 2011

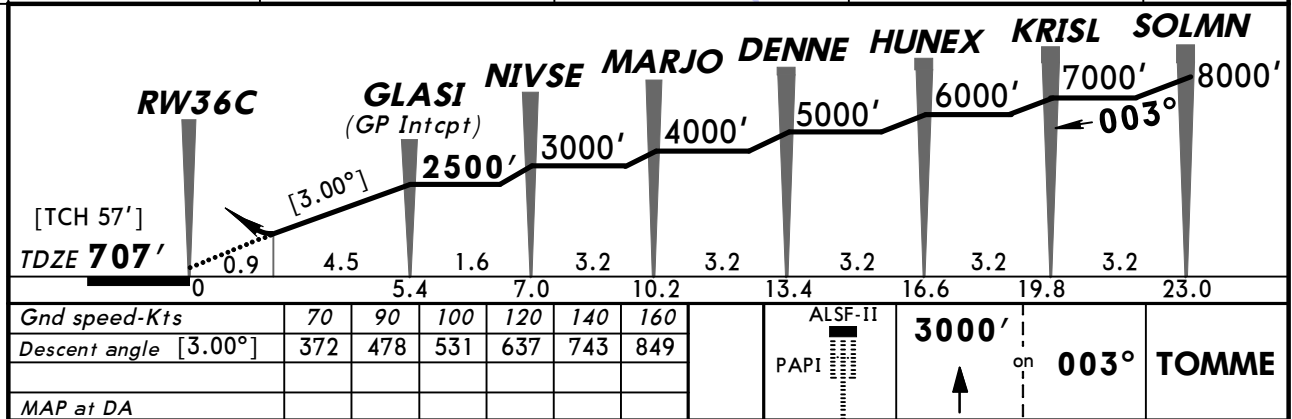
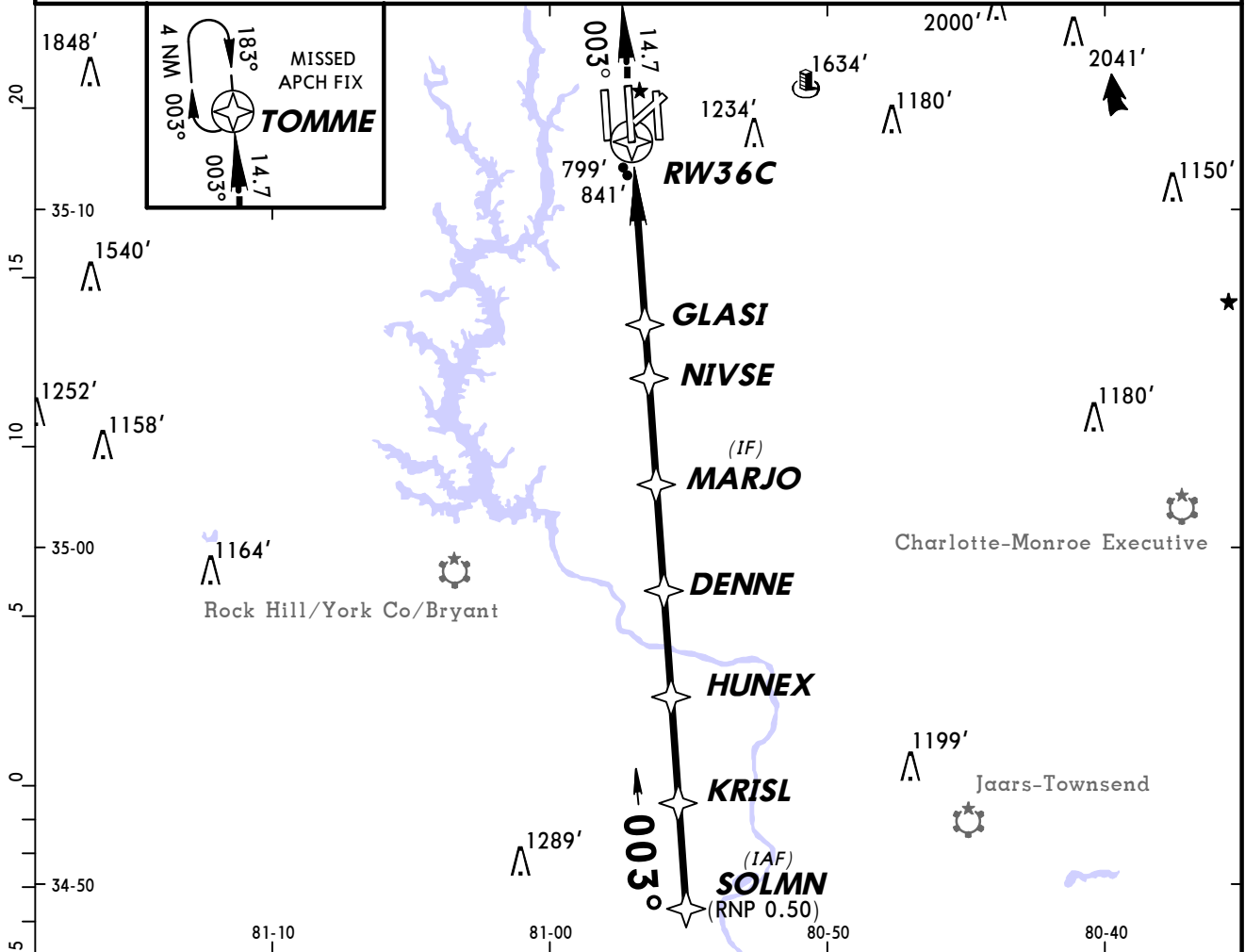


RNAV (RNP) Z Rwy 36C

D-ATIS Arrival	CHARLOTTE Approach (R)					CHARLOTTE Tower			Ground
	Above 8000'		8000' & Below			Rwy	Rwys 5-23 & 18L-36R	Rwy	360°-179° 180°-359°
	246°- 074°	075°- 245°	001°- 119°	120°- 245°	246°- 360°	18C-36C		18R-36L	
121.15	120.5	124.0	128.32	120.05	134.75	126.4	118.1	133.35	121.9 121.8
RNAV	Final Apch Crs		Minimum Alt GLASI		RNP 0.11 DA(H)	Apt Elev 748'		3900' MSA RW36C	
	003°		2500' (1793')		1040' (333')	TDZE 707'			
MISSSED APCH: Climb to 3000' on track 003° to TOMME and hold.									

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

1. **AUTHORIZATION REQUIRED.** 2. **GPS required.** 3. **RADAR required.** 4. For uncompensated Baro-VNAV systems, procedure not authorized below -10°C (14°F) or above 47°C (117°F). 5. VGSI and RNAV glidepath not coincident. 6. Simultaneous approach authorized with ILS or LOC Rwy 36L, ILS Rwy 36L Cat II & III, ILS or LOC Rwy 36R, ILS Rwy 36R II & III. 7. Use of Flight Director or Autopilot providing RNAV track guidance required during simultaneous operations.



		STRAIGHT-IN LANDING RWY 36C			
		RNP 0.11 <i>DA(H)</i> 1040' (333')		RNP 0.30 <i>DA(H)</i> 1143' (436')	
		ALS out		ALS out	
A					
B					
C	RVR 40 or $\frac{3}{4}$	RVR 60 or $\frac{1}{4}$	RVR 50 or 1	1 $\frac{1}{2}$	
D					

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TERPS AMEND 0B 8 MAR 2012	STRAIGHT-IN LANDING RWY 36R	
	RNP 0.30	
	DA(H) 1175' (448')	
		ALS out
	A	
B	RVR 50 or 1	1 1/2
C		
D		

Chart changes since cycle 26-2014

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

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE
CHARLOTTE, NC (CHARLOTTE/DOUGLAS INTL - KCLT)				
REV	AIRPORT, AIRPORT INFO	10-9	05 Dec 2014	
REV	AIRPORT INFO (CONTD), TAK...	10-9A	05 Dec 2014	

TERMINAL CHART CHANGE NOTICES

Chart Change Notices for Airport KCLT

Type: Terminal

Effectivity: Temporary

Begin Date: Immediately

End Date: 20141205

(10-9A) Airport Diagram, Note 2 - Upwind angle 3.25 degrees, downwind angle 2.75 degrees - Deleted. Rwy 18L VASI-R changed to PAPI-L (angle 3.00 degrees). (10-9A) Rwy 23 VASI-R changed to PAPI-R (angle 3.00 degrees) (11-2) ILS or LOC Rwy 18L, VASI-R changed to PAPI-L (11-5) ILS or LOC Rwy 23, VASI-R changed to PAPI-R (12-2) RNAV (GPS) Y Rwy 18L, VASI-R changed to PAPI-L (12-5) RNAV (GPS) Y Rwy 23, VASI-R changed to PAPI-R (12-21) RNAV (RNP) Z Rwy 18L, VASI-R changed to PAPI-L (12-24) RNAV (RNP) Z Rwy 23, VASI-R changed to PAPI-R (