VFR TERMINAL AREA CHART
CHARLOTTE

VFR FLYWAY — CHARLOTTE

Airports having Control Towers are shown in Blue, all others in Magenta. Consult Chart Supplement for details involving airport lighting, navigation aids, and services. All times are local. For additional symbol information refer to the Chart User's Guide.

AIRPORTS

Other than hard-surfaced runways — Seaplane Base

Hard-surfaced runways 1500 ft. or greater

Open dot within hard-surfaced runway configuration indicates approximate VOR, VOR-DME, DME or VORTAC location.

All recognizable hard-surfaced runways, including those closed, are shown for visual identification. Airports may be public or private.

ADDITIONAL AIRPORT INFORMATION

Private "(Pvt)" - Non-public use having landmark value

Military - Other than hard-surfaced; all military airports are identified by abbreviations AFB, NAS, AAF, etc.

Heliport Selected — Unverified — Abandoned - paved having landmark value, 3000 ft. or greater — Ultralight Flight Park Selected

Fuel availability indicated by use of tick marks around basic airport symbol. Consult Supplement for details and availability at airports with hard-surfaced runways 1500 ft. or greater.

Rotating airport beacon in operation Sunset to Sunrise

OBJECTIONABLE - Airport may adversely affect airspace use.

AIRPORT DATA

Box indicates FAR 93 Special Air Traffic Rules & Airport Traffic Patterns. — FSS — FAR 91 — NO SVFR — Location Identifier — NAME (NAM) (PNAM) — ICAO Location Indicator shown outside contiguous U.S.

Runways with Right Traffic Patterns (public use) — see Supplement. — CT - 118.3 ★ Ⓒ ATIS 123.8 — 285 L 72 122.95 — RP 23, 34 — UNICOM

★RP Special conditions exist - see Supplement. — VFR Advsy 125.0 — WX CAM — Weather Camera (AK) — AOE — Airport of Entry

FSS - Flight Service Station

NO SVFR - Fixed-wing special VFR flight is prohibited.

CT - 118.3 - Control Tower (CT) - primary frequency

★ - Star indicates operation part-time. See tower frequencies tabulation for hours of operation.

Ⓒ - Follows the Common Traffic Advisory Frequency (CTAF)

ATIS 123.8 - Automatic Terminal Information Service

AFIS 135.2 - Automatic Flight Information Service (AK)

ASOS/AWOS 135.42 - Automated Surface Weather Observing Systems (shown where full-time ATIS not available). Some ASOS/AWOS facilities may not be located at airports.

UNICOM - Aeronautical advisory station

VFR Advsy - VFR Advisory Service shown where full-time ATIS not available and frequency is other than primary CT frequency.

285 - Elevation in feet

L - Lighting in operation Sunset to Sunrise

*L - Lighting limitations exist; refer to Supplement.

72 - Length of longest runway in hundreds of feet; usable length may be less.

When information is lacking, the respective character is replaced by a dash. Lighting codes refer to runway edge lights and may not represent the longest runway or full length lighting.

AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION

Only the controlled and reserved airspace effective below 18,000 ft. MSL are shown.

Class B Airspace

Class C Airspace (Mode C - see FAR 91.215/AIM.)

Class D Airspace

Ceiling of Class D Airspace in hundreds of feet (A minus ceiling value indicates surface up to but not including that value.) [40]

Class E (sfc) Airspace

Class E Airspace with floor 700 ft. above surface that laterally abuts Class G Airspace. CLASS G

Class E Airspace with floor 700 ft. above surface that laterally abuts 1200 ft. or higher Class E Airspace

Class E Airspace with floor 1200 ft. or greater above surface that laterally abuts Class G Airspace

2400 MSL / 4500 MSL — Differentiates floors of Class E Airspace greater than 700 ft. above surface.

Class E Airspace exists at 1200' AGL unless otherwise designated as shown above.

Class E Airspace low altitude Federal Airways and RNAV 2 Routes are indicated by center line.

Intersection - Arrows are directed towards facilities which establish intersection.

132° — V 69

Total mileage between NAVAIDs on direct Airways — 169

T 319 — TK 313 (Helicopter Only) — RNAV Waypoint

Prohibited, Restricted, and Warning Areas

*Alert Area and Military Operations Area (MOA)

*Alert Areas do not extend into Class A, B, C and D airspace, or Class E airport surface areas.

Special Airport Traffic Area (See FAR 93 for details.)

National Defense Airspace Temporary Flight Restriction Area

ADIZ - Air Defense Identification Zone

MODE C (See FAR 91.215/AIM.)

National Security Area

Terminal Radar Service Area (TRSA)

IR211 — MTR - Military Training Route

IFR Departure Route

IFR Arrival Route

IFR Arrival/Departure Route

COMMUNICATION BOXES

122.6 — 123.6 — OAKDALE 362★ 116.8 OAK — 123.6 — HOMER HOM

Underline indicates no voice on frequency.

- Crosshatch indicates Shutdown status.

★ - Operates less than continuous or On-Request.

Ⓐ - ASOS/AWOS

Heavy line box indicates Flight Service Station (FSS). Frequencies 121.5, 122.2 and 243.0 are available at many Alaskan FSSs and are not shown above boxes. All other frequencies are shown.

R - Receive only

122.1R — MIAMI

FSS radio providing voice communication

Frequencies above thin line box are remoted to NAVAID site. Other FSS frequencies providing voice communication may be available as determined by altitude and terrain. Consult Supplement for complete information.

RADIO AIDS TO NAVIGATION

VHF OMNI RANGE (VOR) — VORTAC

VOR-DME — DME — Other facilities, i.e., FSS Outlet, RCO, WX CAM (AK) (see Supplement), etc.

Non-Directional Radio Beacon (NDB) — NDB - DME

OBSTRUCTIONS
(may be lit or unlit)

1000 ft and higher AGL

Above 200 ft & below 1000 ft AGL (above 299 ft AGL in urban area)

Wind Turbine — Group Obstruction — Wind Turbine Farm — 2894' UC

Obstruction with high-intensity lights; may operate part-time

Elevation of the top above mean sea level — 2049 — Height above ground — (1149) — Under construction or reported; position and elevation unverified — UC

NOTICE: Guy wires may extend outward from structures.

MISCELLANEOUS

A - Aerobatic Practice Area (See Supplement.)

G - Glider Operations

H - Hang Glider Activity

U - Ultralight Activity

UA - Unmanned Aircraft Activity

Parachute Jumping Area (See Supplement.)

STADIUM — Intermittent TFR site (within 3 NM, up to & incl 3000' AGL.)

Space Launch Activity Area

Marine Light

−1°E− Isogonic Line (2020 VALUE)

VPXYZ — VFR Waypoints — NAME (VPXYZ)

TOPOGRAPHIC INFORMATION

Power Transmission Line

Aerial Cable

Lookout Tower 618 (Elevation Base of Tower)

Mountain Pass 11823 (Elevation of Pass)

Pass symbol does not indicate a recommended route or direction of flight and pass elevation does not indicate a recommended clearance altitude. Hazardous flight conditions may exist within and near mountain passes.

Features normally used as checkpoints for controlling VFR traffic are emphasized on this series of charts so they may be readily identified.

Example: POWER PLANT

The name shown is that used by the controlling personnel and is not necessarily the official name of the feature.

CAUTION: This chart is primarily designed for VFR navigational purposes and does not purport to indicate the presence of all power transmission and telecommunication lines, terrain or obstacles which may be encountered below reasonable and safe altitudes.

CAUTION: Severe turbulence may occur over rugged terrain. See AIM.

ATTENTION

THIS CHART CONTAINS MAXIMUM ELEVATION FIGURES (MEF).
The Maximum Elevation Figures shown in quadrangles bounded by ticked lines of latitude and longitude are represented in THOUSANDS and HUNDREDS of feet above mean sea level. The MEF is based on information available concerning the highest known feature in each quadrangle, including terrain and obstructions (trees, towers, antennas, etc.).

Example: 12,500 feet .... 12^5

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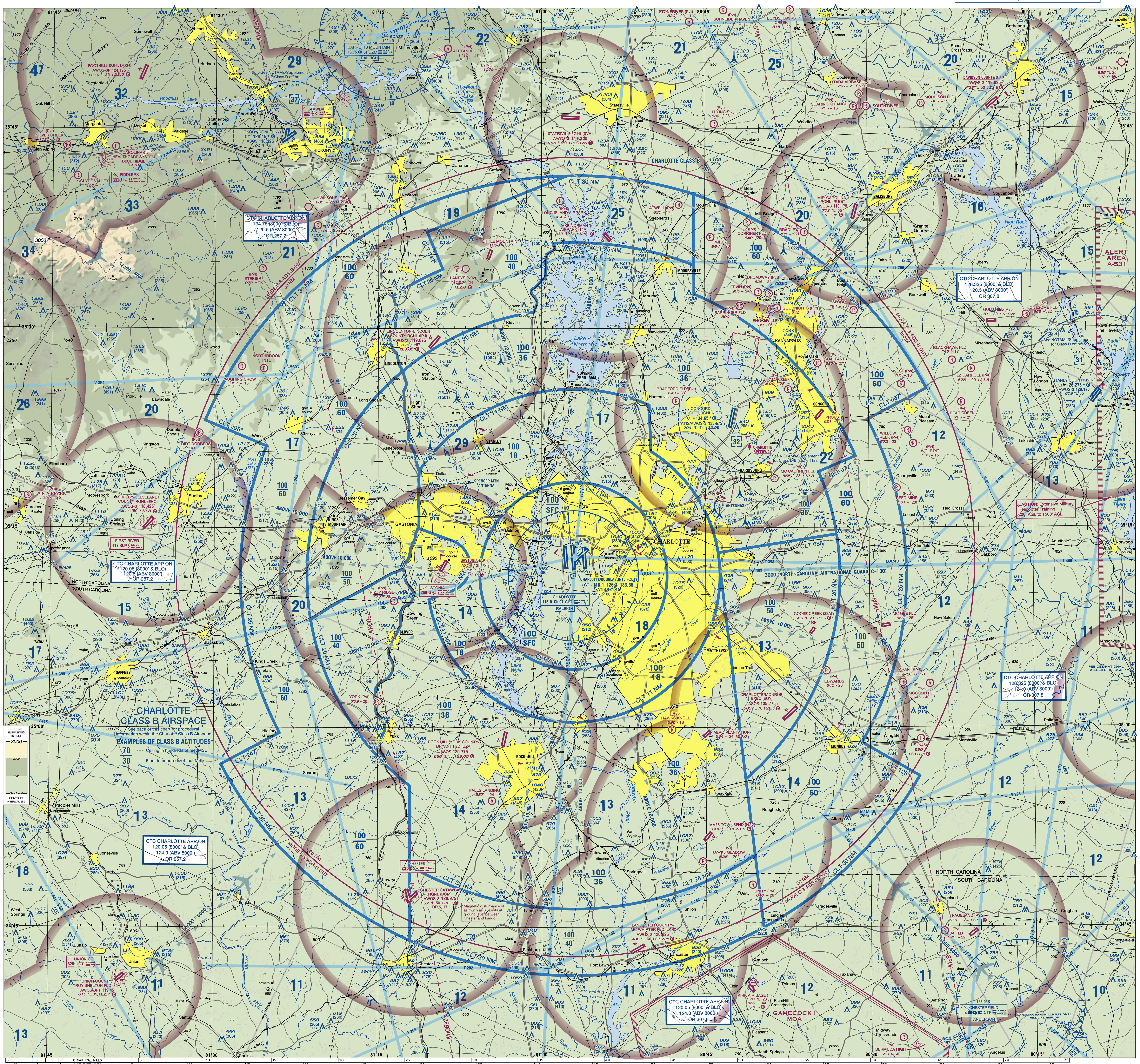
CONVERSION OF ELEVATIONS

FEET (Thousands)	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
METERS (Thousands)	0	1	2	3	4	5	6	7	8	9						

Entire area of this chart is within the Eastern Standard Time Zone +5 (+4 DT)=UTC

NORTH AMERICAN AEROSPACE DEFENSE COMMAND (NORAD) PROCEDURES

All aircraft operating in the U.S. national airspace, if capable, will maintain a listening watch on guard frequencies VHF 121.5 or UHF 243.0. It is incumbent upon all aviators to know and understand their responsibilities if intercepted. Review "AIM" section 5-6-13 for intercept procedures. Additionally, if U.S. military fighter jets intercept an aircraft and flares are dispensed in the area of that aircraft, aviators will pay strict attention, contact air traffic control immediately on the local frequency or on VHF guard 121.5 or UHF 243.0 and follow the interceptor visual ICAO signals. Be advised that non-compliance may result in the use of force.



CHARLOTTE

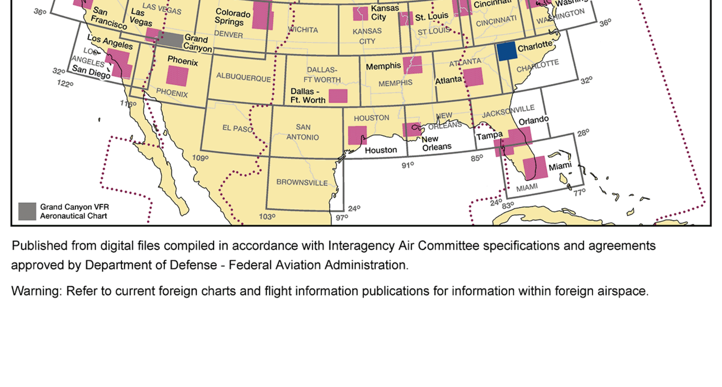
CHARLOTTE TAC
VFR TERMINAL AREA CHART SCALE 1:250,000

Federal Aviation Administration

EFFECTIVE 0901Z **15 JUN 2023**
TO 0901Z **10 AUG 2023**

Consult NOTAMs for latest information

Consult/Subscribe to FAA Safety Alerts and Charting Notices at: http://www.faa.gov/air_traffic/flight_info/aeronav/safety_alerts/



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Warning: Refer to current foreign charts and flight information publications for information within foreign airspace.

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NGA REF. NO. VFRTACHARLOTTE

EFF. DATE 23166

Flight Following Services are available on request and highly recommended in and around Class B, C, and TRSA areas.

REGULATIONS REGARDING FLIGHTS OVER CHARTED NATIONAL PARK SERVICE AREAS, U.S. FISH AND WILDLIFE SERVICE AREAS, BUREAU OF LAND MANAGEMENT AREAS AND U.S. FOREST SERVICE AREAS

The landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management or U.S. Forest Service (hereafter referred to as Agency/Agencies) without authorization from the respective agency. Exceptions include: 1) when forced to land due to an emergency beyond the control of the operator, 2) at officially designated landing sites, or 3) on approved official business of the Federal Government. All aircraft are requested to maintain a minimum altitude of 2,000 feet above the surface of the following: National Parks, Monuments, Seashores, Lakeshores, Recreation Areas, Scenic Riverways, Wildlife Refuges, Big Game Refuges, Game Ranges, Wildlife Ranges, Conservation Areas, Wild and Scenic Rivers, Wilderness Areas and Primitive Areas administered by the Agencies. FAA Advisory Circular (AC) 91-36, "Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas," defines the surface as: the highest terrain within 2,000 feet laterally of the route of flight, or the upper-most rim of a canyon or valley. Federal regulations also prohibit airdrops by parachute or other means of persons, cargo, or objects from aircraft on lands administered by the four agencies without authorization from the respective agency. Exceptions include: 1) emergencies involving the safety of human life, or 2) threat of serious property loss.

Boundary of Agency Areas

Class G Airspace within the United States extends up to 14,500 feet MSL. At and above this altitude all airspace is within Class E Airspace, excluding the airspace less than 1500 feet above the terrain and certain special use airspace areas.

Lambert Conformal Conic Projection Standard Parallels 33° and 45°
Horizontal Datum: North American Datum of 1983 (World Geodetic System 1984)

CAUTION: Unmanned Aircraft Systems (UAS) may be approved to operate above critical infrastructure including obstacles and linear features such as high-voltage powerlines, pipelines and railroads. Check NOTAMs and see AIM for details.

THIS CHART IDENTIFIES VFR FLYWAYS DESIGNED TO HELP VFR PILOTS AVOID MAJOR CONTROLLED TRAFFIC FLOWS. IT DEPICTS MULTIPLE VFR ROUTINGS THROUGHOUT THE CHARLOTTE AREA WHICH MAY BE USED AS ALTERNATES TO FLIGHT WITHIN THE ESTABLISHED CLASS B AIRSPACE. ITS GROUND REFERENCES PROVIDE A GUIDE FOR IMPROVED VISUAL NAVIGATION. THIS IS NOT INTENDED TO DISCOURAGE REQUESTS FOR VFR OPERATIONS WITHIN THE CLASS B AIRSPACE BUT IS DESIGNED SOLELY FOR INFORMATION AND PLANNING PURPOSES.

CAUTION

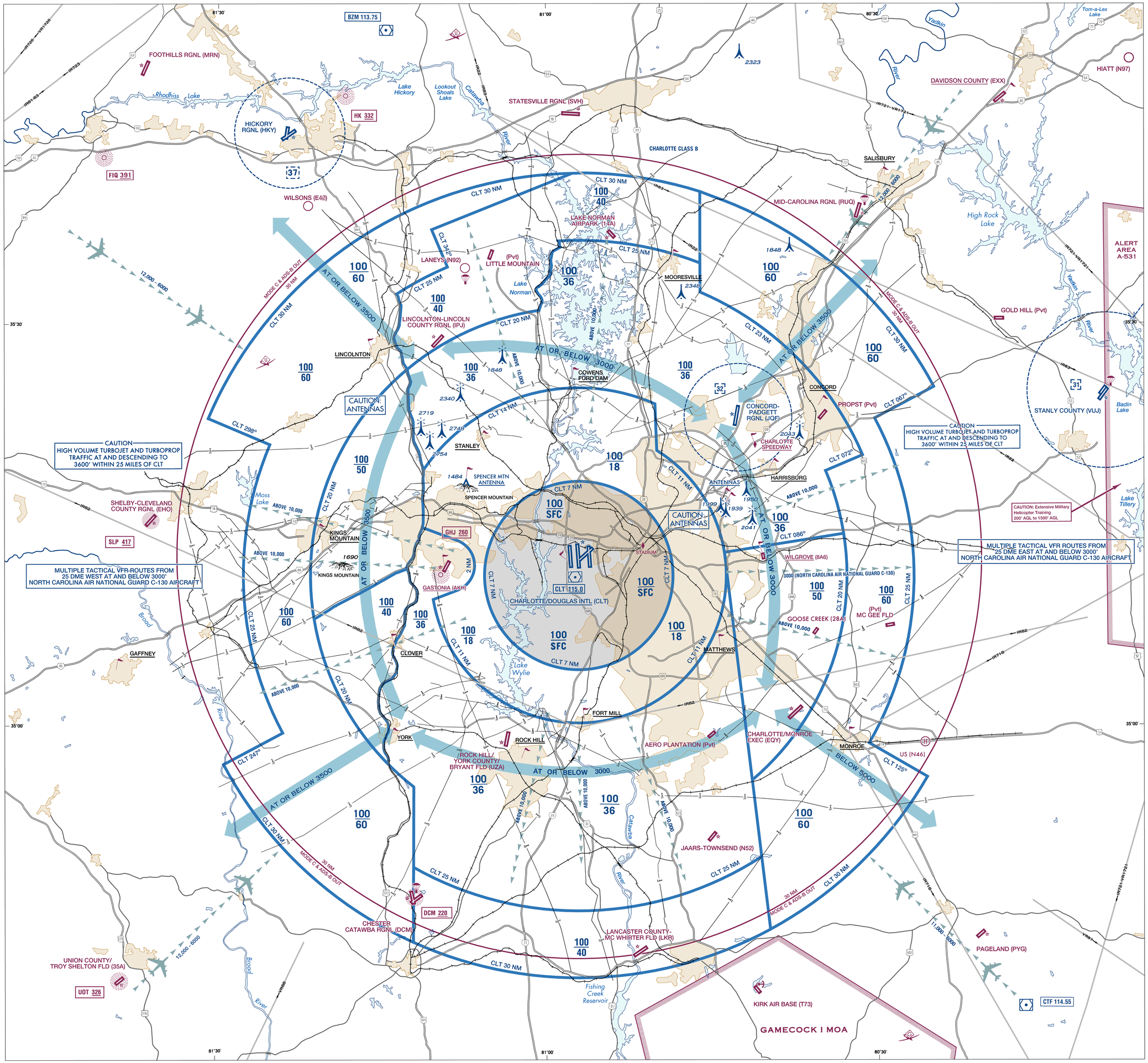
THE ENTIRE CHARLOTTE AREA IS HEAVILY CONGESTED WITH MANY DIFFERENT AIRCRAFT TYPES. THESE ROUTE SUGGESTIONS ARE NOT STERILE OF OTHER TRAFFIC; THEY ARE AREAS WE BELIEVE LEAST CONGESTED IN AN AREA OF HEAVY CONGESTION. PILOT ADHERENCE TO VFR RULES MUST BE EXERCISED AT ALL TIMES. COMMUNICATIONS MUST BE MAINTAINED BETWEEN AIRCRAFT AND CONTROL TOWERS WHILE IN CLASS D AIRSPACE.

MILITARY TRAINING ROUTES (MTRs)

All IR and VR MTRs are shown, and may extend from the surface upwards. Only the route centerline, direction of flight along the route, and the route designator are depicted - route widths and altitudes are not shown.

DoD users refer to Area Planning AP/1B Military Training Routes North and South America for current routes.

VFR FLYWAY PLANNING CHART
CHARLOTTE
Scale 1:250,000
NOT TO BE USED FOR NAVIGATION



AIRPORTS
Paved Runways
NAME (NAM)
NAME (NAM)
Unpaved Runways
NAME (NAM)

RADIO AIDS TO NAVIGATION
VOR DLG 138.8
NDB DCW 262
VORTAC PPS 121.8
NDB-DME RMW 320
VOR-DME KIP 110.7
DME PVU CH 21 (108.4)

AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION

Class B Airspace
Class C Airspace (Mode C - see FAR 91.215/AIM.)
Class B/C Surface Area
Prohibited, Restricted, and Warning Areas
*Alert Area and Military Operations Area (MOA)
*Alert Areas do not extend into Class A, B, C and D airspace, or Class E airport surface areas.
IFR Departure Routes
IFR Arrival Routes
IFR Arrival/Departure Routes

Examples of Class B Airspace Altitudes
70 - - - Ceiling in hundreds of feet MSL
30 - - - Floor in hundreds of feet MSL
Mode C (See FAR 91.215/AIM.)
Class D Airspace
40 Ceiling of Class D Airspace in hundreds of feet (A minus ceiling value indicates surface up to but not including that value.)
Class E (sfc) Airspace

Suggested VFR Flyway and Altitude
2600 6700

OBSTRUCTIONS (Selected) (may be lit or unlit) 2049

MISCELLANEOUS Navigation Reference Point N39° 56.32' W120° 36.91'

TOPOGRAPHIC INFORMATION 12256 Mountain Top or Peak and Spot Elevation

CHARLOTTE CLASS B AIRSPACE

OPERATING RULES AND PILOT/EQUIPMENT REQUIREMENTS: Regardless of weather conditions, an ATC authorization is required prior to operating within the Class B Airspace. Pilots should not request an authorization to operate within the Class B Airspace unless the requirements of FAR 91.215 and FAR 91.131 are met. Included among those requirements are:

1. Unless otherwise authorized by ATC, an operable two-way radio capable of communicating with ATC on appropriate frequencies for that Class B Airspace.
2. No person may take off or land a civil aircraft at an airport within the Class B Airspace or operate a civil aircraft within the Class B Airspace unless:
   (a) The pilot in command holds at least a Private Pilot certificate, or holds a Recreational Pilot certificate and has met the requirements of FAR 61.101(d); or holds a Sport Pilot certificate and has met the requirements of FAR 61.325, or:
   (b) The aircraft is operated by a student pilot who has met the requirements of FAR 61.94 or FAR 61.95 as applicable.
3. Unless otherwise authorized by ATC, each person operating a large turbine engine-powered aircraft to or from a primary airport shall operate at or above the designated floors while within the lateral limits of the Class B Airspace.
4. An operable VOR or TACAN receiver for IFR operations.
5. A transponder with automatic altitude reporting equipment.

NOTE: ATC may, upon notification, immediately authorize a deviation from the altitude reporting equipment requirement or for a transponder failure; however, other requests for deviations from the transponder equipment requirement must be submitted to the controlling ATC facility at least one hour before the proposed operation.

FLIGHT PROCEDURES

IFR FLIGHTS—Aircraft operating within the Charlotte Class B Airspace must be operated in accordance with ATC clearances and instructions.

VFR FLIGHTS—

1. Arriving aircraft should contact the appropriate approach control on specified frequencies and in relation to geographic fixes shown on the accompanying chart. Although arriving aircraft may be operating beneath the floor of the Class B Airspace on initial contact, communications should be established with approach control in relation to the points indicated for sequencing and spacing purposes.
2. Aircraft departing the primary airports 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 the primary airports whose route of flight would penetrate the Class B Airspace should give this information to ATC on the appropriate frequencies.
3. Aircraft desiring to transit the Class B Airspace must obtain an ATC clearance to enter the Class B Airspace and will be handled on an ATC workload permitting basis.

ATC PROCEDURES

All aircraft will be controlled and separated while operating within the Class B Airspace, except helicopters need not be separated from other helicopters. Although radar separation will be the primary standard used, approved visual and other nonradar procedures will be applied as required or deemed appropriate. Traffic information on observed but unidentified radar targets will be provided on a workload permitting basis to aircraft operating outside the Class B Airspace.

NOTE: Assignment of radar headings and/or altitudes is based on the provision that a pilot operating in accordance with visual flight rules is expected to advise ATC if compliance with an assigned route, radar heading, or altitude will cause the pilot to violate such rules.

CONTROL TOWER FREQUENCIES ON CHARLOTTE TERMINAL AREA CHART

Airports with control towers are indicated on the face of the chart by the letters CT followed by the primary VHF tower frequency(ies). Information for each tower is listed in the table below. Operational hours are local time. The primary VHF and UHF tower and ground control frequencies are listed.

Automatic Terminal Information Service (ATIS) frequencies shown on the face of the chart are arrival VHF/UHF frequencies. All ATIS frequencies are listed in the table below. ATIS operational hours may differ from tower operational hours.

ASR and/or PAR indicate Radar Instrument Approach available.
"MON-FRI" indicates Monday through Friday.
O/T indicates other times.

CONTROL TOWER	OPERATES	TOWER	GND CON	ATIS	ASR/PAR
CHARLOTTE/DOUGLAS INTL	CONTINUOUS	118.1 (RWY 18L/36R) 126.4 (RWY 18C/36C) 133.35 (RWY 18R/36L) 257.8	121.8 (WEST) 121.9 (EAST) 348.6	121.15 (ARR) 132.1 (DEP)	
CONCORD-PADGETT RGNL	0700-2300	134.65	121.85	133.675	
HICKORY RGNL	0700-2100	128.15	121.7		
STANLY COUNTY	0800-1730 O/T BY NOTAM	126.275 291.9	121.75 254.375		PAR

CLASS B, CLASS C, TRSA, AND SELECTED APPROACH CONTROL FREQUENCIES

FACILITY	FREQUENCIES	SERVICE AVAILABILITY
CHARLOTTE CLASS B	128.325 (001°-119° 8000' & BELOW) 120.05 (120°-295° 8000' & BELOW) 134.75 (296°-360° 8000' & BELOW) 124.0 (075°-245° ABOVE 8000') 120.5 (246°-074° ABOVE 8000') 257.2 (180°-359°) 307.8 (360°-179°)	CONTINUOUS

SPECIAL USE AIRSPACE ON CHARLOTTE TERMINAL AREA CHART

Unless otherwise noted altitudes are MSL and in feet. Time is local.
"TO" an altitude means "To and including."
FL = Flight Level
NO A/G = No air to ground communications.
Contact Flight Service for information.

† Other times by NOTAM.
NOTAM – Use of this term in Restricted Areas indicates FAA and DoD NOTAM systems. Use of this term in all other Special Use areas indicates the DoD NOTAM system.

U.S. P–PROHIBITED, R–RESTRICTED, W–WARNING, A–ALERT, MOA–MILITARY OPERATIONS AREA

NUMBER	ALTITUDE	TIME OF USE	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
A-531	200 AGL TO 1500 AGL	INTERMITTENT 0600-2400 MON-FRI BY NOTAM SAT-SUN	NO A/G	

Alert Areas do not extend into Class A, B, C and D airspace, or Class E airport surface areas.

MOA NAME	ALTITUDE*	TIME OF USE†	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
GAMECOCK I	100 AGL TO 6000	INTERMITTENT 0800-2400	JACKSONVILLE CNTR	

*Altitudes indicate floor of MOA. All MOAs extend to but do not include FL 180 unless otherwise indicated in tabulation or on chart.
†Other times by DoD NOTAM.

REPORTING CHART ERRORS

You are requested to inform us of chart errors and/or additions that come to your attention while using this chart. See frequently asked questions (FAQs) on our website at http://faa.gov/go/ais/ prior to contacting us via toll free number at 1-800-638-8972 or visit https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/ or mail to: FAA, Aeronautical Information Services,1305 East-West Highway, SSMC 4, Suite 4400, Silver Spring, MD 20910-3281.