# EXPLANATION OF VFR TERMS AND SYMBOLS

The discussions and examples in this section are based on the Sectional Aeronautical Chart (Sectional). Sectionals include the most current data and are at a scale (1:500,000) most beneficial to pilots flying under Visual Flight Rules. A pilot should have little difficulty in reading these charts which are, in many respects, similar to automobile road maps. Each chart is named for a major city within its area of coverage.

The chart legend lists various aeronautical symbols as well as information concerning terrain and contour elevations. You may identify aeronautical, topographical, and obstruction symbols (such as radio and television towers) by referring to the legend. Many landmarks which can be easily recognized from the air, such as stadiums, pumping stations, refineries, etc., are identified by brief descriptions adjacent to small black squares marking their exact locations ▪ cabln . Oil wells are shown by small open circles ○ oil . Water, oil and gas tanks are shown by small black circles • water and labeled accordingly, if known. The scale of an item may be increased to make it easier to read on the chart.

NACO charts are prepared in accordance with specifications of the Interagency Air Cartographic Committee (IACC) and are approved by representatives of the Federal Aviation Administration (FAA) and the Department of Defense (DoD).

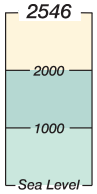
## TERRAIN AND OBSTRUCTIONS

The elevation and configuration of the Earth's surface are certainly of prime importance to pilots. Cartographers devote a great deal of attention to showing relief and obstruction data in a clear and concise manner. Five different techniques are used: contour lines, shaded relief, color tints, obstruction symbols, and Maximum Elevation Figures. (MEF)

1. Contour lines are lines connecting points on the Earth of equal elevation. On Sectionals, basic contours are spaced at 500' intervals. Intermediate contours may also be shown at 250' intervals in moderately level or gently rolling areas. Occasionally, auxiliary contours at 50, 100, 125, or 150' intervals may be used to portray smaller relief features in areas of relatively low relief. The pattern of these lines and their spacing gives the pilot a visual concept of the terrain. Widely spaced contours represent gentle slopes, while closely spaced contours represent steep slopes.


2. Shaded relief is a depiction of how the terrain might appear from the air. The cartographer shades the areas that would appear in shadow if illuminated by a light from the northwest. Studies have indicated that our visual perception has been conditioned to this view.


3. Color tints are used to depict bands of elevation. These colors range from light green for the lowest elevations to brown for the higher elevations.



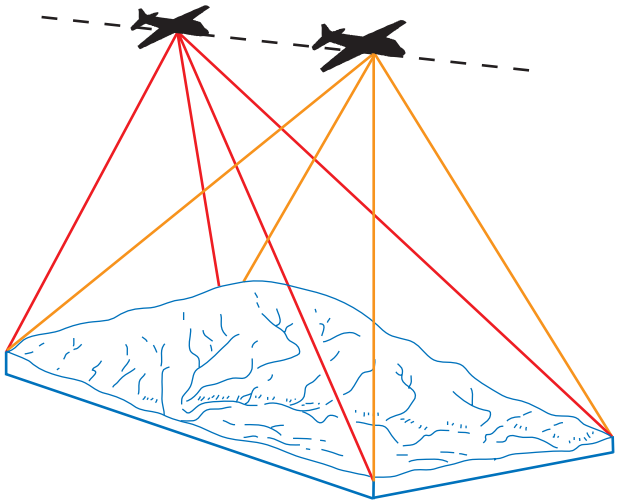

4. Obstruction symbols are used to depict man-made vertical features that may affect the National Airspace System. NACO maintains a file of over 109,000 obstacles in the United States, Canada, the Caribbean and Mexico. Each obstacle is evaluated by cartographers before it is added to the visual charts. When the position or elevation of an obstacle is unverified, it is marked UC (under construction or reported but not verified).

The data in the Digital Obstacle File (DOF) is collected and disseminated as part of NACO's responsibility for depicting the National Airspace System.

Source data on terrain and obstructions is sometimes not complete or accurate enough for use in aeronautical publications; for example, a reported obstruction may be submitted with insufficient detail for determining the obstruction's position and elevation. Such cases are identified by NACO and investigated by the FAA Flight Edit program.

The FAA Flight Edit crew conducts data verification missions, visually verifying cultural and topographic features and reviewing all obstacle data. This review includes checking for obstructions that may have been constructed, altered, or dismantled without proper notification. Unverified obstacles are subsequently photo-

graphed and the position and elevation are determined photogrammetrically.



Generally, only man-made structures extending more than 200' above ground level (AGL) are charted. Objects 200' or less are charted only if they are considered hazardous obstructions; for example, an obstruction is much higher than the surrounding terrain or very near an airport. Examples of features considered hazardous obstacles to low level flight are antennas, tanks, factories, lookout towers, and smoke-stacks.

Obstacles less than 1000' AGL are shown by the symbol . Obstacles 1000' and higher AGL are shown by the symbol . Man-made features which are used by FAA Air Traffic Control as checkpoints may be represented with pictorial symbols shown in black with the required elevation data in blue.

The elevation of the top of the obstacle above mean sea level (MSL) and the height of the structure AGL are shown when known or when they can be reliably determined by the cartographer. The AGL height is shown in parentheses below the MSL elevation. In extremely congested areas the AGL values may be omitted to avoid confusion.


Obstacles are portrayed wherever possible. But since legibility would be impaired if all obstacles within city complexes or within high density groups of obstacles were portrayed, only the highest obstacle in an area is shown using 4977 (1432), the group obstacle symbol.

Obstacles under construction are indicated by the letters UC immediately adjacent to the symbol. If available, the AGL height of the obstruction is shown in parentheses; for example, (1501). Obstacles with high-intensity strobe lighting systems are shown as:

5. The Maximum Elevation Figure (MEF) represents the highest elevation, including terrain and other vertical obstacles (towers, trees, etc.), within a quadrant. A quadrant on Sectionals is the area bounded by ticked lines dividing each 30 minutes of latitude and each 30 minutes of longitude. MEF figures are depicted to the nearest 100' value. The last two digits of the number are not shown. In this example the MEF represents 12,500'.

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 ..... 125

MEFs are shown over land masses as well as over open water areas containing man-made obstacles such as oil rigs.

In the determination of MEFs, extreme care is exercised to calculate the values based on the existing elevation data shown on source material. Cartographers use the following procedure to calculate MEFs:

When a man-made obstacle is more than 200' above the highest terrain within the quadrant:

1. Determine the elevation of the top of the obstacle above MSL.
2. Add the possible vertical error of the source material to the above figure (100' or 1/2 contour interval when interval on source exceeds 200'. U.S. Geological Survey Quadrangle Maps with contour intervals as small as 10' are normally used).
3. Round the resultant figure up to the next higher hundred foot level.

**Example: Elevation of obstacle top (MSL) = 2424**
**Possible vertical error + 100**
**equals 2524**
**Raise to the following 100 foot level 2600**

**Maximum Elevation Figure 26**

When a natural terrain feature or natural vertical obstacle (e.g. a tree) is the highest feature within the quadrangle.:

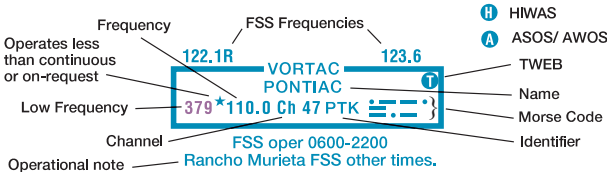
1. Determine the elevation of the feature.
2. Add the possible vertical error of the source to the above figure (100' or 1/2 the contour interval when interval on source exceeds 200').
3. Add a 200' allowance for natural or man-made obstacles which are not portrayed because they are below the minimum height at which the chart specifications require their portrayal.
4. Round the figure up to the next higher hundred foot level.

| | |
|---|---|
| **Example: Elevation of obstacle top (MSL) =** | **3450** |
| **Possible vertical error +** | **100** |
| **Obstacle Allowance** | **200** |
| **equals** | **3750** |
| **Raise to the following 100 foot level** | **3800** |
| **Maximum Elevation Figure** | **38** |

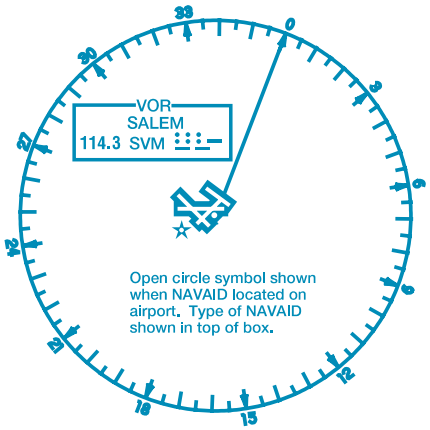
Pilots should be aware that while the MEF is based on the best information available to the cartographer, the figures are not verified by field surveys. Also, users should consult the Aeronautical Chart Bulletin in the A/FD or NACO website to ensure that your chart has the latest MEF data available.

## RADIO AIDS TO NAVIGATION

On visual charts, information about radio aids to navigation is boxed, as illustrated. Duplication of data is avoided. When two or more radio aids in a general area have the same name with different frequencies, TACAN channel numbers, or identification letters, and no misinterpretation can result, the name of the radio aid may be indicated only once within the identification box. VHF/UHF radio aids to navigation names and identification boxes (shown in blue) take precedence. Only those items that are different (e.g., frequency, Morse Code) are repeated in the box in the appropriate color. The choice of separate or combined boxes is made in each case on the basis of economy of space and clear identification of the radio aids.




Radio aids to navigation located on an airport depicted by the pattern symbol may not always be shown by the appropriate symbol. A small open circle indicates the NAVAID location when co-located with an airport symbol. The type of radio aid to navigation may be indicated by letter identification; e.g., VOR, VORTAC, etc., positioned on and breaking the top line of the identification box.




## AIRPORTS

Airports in the following categories are charted as indicated (additional symbols are shown later in this Section).

Public use airports:

- Hard-surfaced runways greater than 8069' or some multiple runways less than 8069'
- Hard-surfaced runways 1500' to 8069'
- Other than hard-surfaced runways
- Seaplane bases

Military airports:

- Other than hard-surfaced runways

Hard-surfaced runways are depicted the same as public-use airports.

U.S. military airports are identified by abbreviations such as AAF (Army Air Field), AFB (Air Force Base), MCAS (Marine Corps Air Station), NAS (Naval Air Station), NAF (Naval Air Facility), NAAS Naval Auxiliary Air Station), etc. Canadian military airports are identified by the abbreviation DND (Department of National Defense).

Services available:

Tick marks around the basic airport symbol indicate that fuel is available and the airport is tended during normal working hours. (Normal working hours are Monday through Friday 10:00 A.M. to 4:00 P.M. local time.)

Other airports with or without services:

H F U R

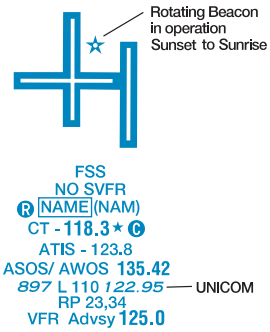
Airports are plotted in their true geographic position unless the symbol conflicts with a radio aid to navigation (navaid) at the same location. In such cases, the airport symbol will be displaced, but the relationship between the airport and the navaid will be retained.

Airports are identified by their designated name. Generic parts of long airport names (such as "airport", "field" or "municipal") and the first names of persons are commonly omitted unless they are needed to distinguish one airport from another with a similar name.

The following figure illustrates the coded data that is provided along with the airport name. The elevation of an airport is the highest point on the usable portion of the landing areas. Runway length is the length of the longest active runway including displaced thresholds

and excluding overruns. Runway length is shown to the nearest 100', using 70 as the division point; a runway 8070' in length is charted as 81, while a runway 8069' in length is charted as 80.

Airports with Control Towers (CT), and their related information, are shown in blue. All other airports, and their related information, are shown in magenta (reddish purple).




FSS - FIight Service Station on field
NO SVFR - Airports where fixed wing special visual flight rules operations are prohibited (shown above airport name) F.A.R. 91
[ ] - Indicates F.A.R. 93 Special Air Traffic Rules and Airport Traffic Patterns
Ⓡ - Airport Surveillance Radar (Not shown on WAC)
(NAM) - Location Identifier
CT - 118.3 - Control Tower (CT) - primary frequency
★ - Star indicates operation part-time. See tower frequencies tabulation for hours of operation
Ⓒ - Indicates Common Traffic Advisory Frequencies (CTAF) (Not shown on WAC)
ATIS 123.8 - Automatic Terminal Information Service
ASOS/ AWOS 135.42 - Automated Surface Weather Observing Systems (Shown when full-time ATIS is not available) Some ASOS/AWOS facilities may not be located at airport. (Not shown on WAC)
897 - Elevation in feet
L - Lighting in operation Sunset to Sunrise
*L - Lighting limitations exist; refer to Airport/Facility Directory.
110 - Length of longest runway in hundreds of feet; usable length may be less.
UNICOM - Aeronautical advisory station ("U" only on WAC)
RP 23,34 - Runways with Right Traffic Patterns (public use) (Not shown on WAC)
RP* - (See Airport/Facility Directory)
VFR Advsy 125.0 - VFR Advisory Service shown where ATIS is not available and frequency is other than primary CT frequency.

The symbol ☆ indicates the existence of a rotating or flashing airport beacon operating continuously sunset to sunrise.

The symbol L indicates that runway lights are on during hours of darkness. A *L indicates that the pilot must consult the Airport/Facility Directory (A/FD) to determine runway lighting limitations, such as: available on request (by radio call, letter, phone, etc), part-time lighting or pilot/airport controlled lighting. The lighted runway may not be the longest runway available, and may not be lighted full length. A detailed description of airport and air navigation lighting aids available at each airport can be found in the A/FD. The Aeronautical Information Manual (AIM) thoroughly explains the types and uses of airport lighting aids.

## CONTROLLED AIRSPACE

Controlled airspace consists of those areas where some or all aircraft may be subject to air traffic control, such as Class A, Class B, Class C, Class D, Class E Surface (SFC) and Class E Airspace.

**Class A Airspace** within the United States extends from 18,000' up to 60,000' MSL. While visual charts do not depict Class A, it is important to note its existance.

**Class B Airspace** is shown in abbreviated form on the World Aeronautical Chart (WAC). The Sectional Aeronautical Chart (Sectional) and Terminal Area Chart (TAC) show Class B in greater detail. The MSL ceiling and floor altitudes of each sector are shown in solid blue figures with the last two digits omitted: $\frac{90}{20}$ Radials and arcs used to define Class B are prominently shown on TACs. Detailed rules and requirements associated with the particular Class B are shown. The name by which the Class B is identified is shown as: LAS VEGAS CLASS B

**Class C Airspace** is shown in abbreviated form on WACs. Sectionals and TACs show Class C in greater detail.

The MSL ceiling and floor altitudes of each sector are shown in solid magenta figures with the last two digits eliminated: $\frac{70}{15}$ . The following figures identify a sector that extends from the surface to the base of the Class B: $\frac{T}{SFC}$ . The name by which the Class C is identified is shown as: BURBANK CLASS C . Separate notes, enclosed in magenta boxes, give the approach control frequencies to be used by arriving VFR aircraft to establish two-way radio communication before entering the Class C (generally within 20 NM):

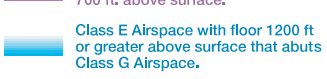
CTC BURBANK APP WITHIN
20 NM ON 124.6 395.9

**Class D Airspace** is symbolized by a blue dashed line. Class D operating less than continuous is indicated by the following note: See NOTAMs/Directory for Class D eff hrs . Ceilings of Class D are shown as follows: [30] . A minus in front of the figure is used to indicate "from surface to but not including .... ."

**Class E Surface (SFC) Airspace** is symbolized by a magenta dashed line. Class E SFC operating less than continuous is indicated by the following note:

See NOTAMs/Directory
for Class E (sfc) eff hrs

**Class E Airspace** exists at 1200' above ground level unless designated otherwise. The lateral and vertical limits of all Class E up to but not including 18,000' are shown by narrow bands of vignette on Sectionals and TACs. Controlled airspace floors of 700' above the ground are defined by a magenta vignette; floors other than 700'



that abut uncontrolled airspace (Class G) are defined by a blue vignette; differing floors greater than 700' above the ground are annotated by a symbol 

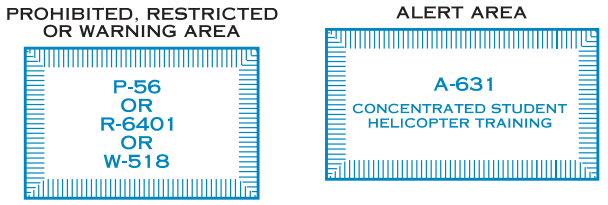
and a number indicating the floor. If the ceiling is less than 18,000' MSL, the value (prefixed by the word "ceiling") is shown along the limits of the controlled airspace. These limits are shown with the same symbol indicated above.

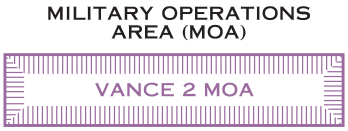
## UNCONTROLLED AIRSPACE

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

## SPECIAL USE AIRSPACE

Special use airspace confines certain flight activities and restricts entry, or cautions other aircraft operating within specific boundaries. Except for Controlled Firing Areas, special use airspace areas are depicted on visual aeronautical charts. Controlled Firing Areas are not charted because their activities are suspended immediately when spotter aircraft, radar, or ground lookout positions indicate an aircraft might be approaching the area. Nonparticipating aircraft are not required to change their flight paths. Special use airspace areas are shown in their entirety (within the limits of the chart), even when they overlap, adjoin, or when an area is designated within another area. The areas are identified by type and identifying name or number, positioned either within or immediately adjacent to the area.




## OTHER AIRSPACE AREAS

**Mode C Required Airspace** (from the surface to 10,000' MSL) within 30 NM radius of the primary airport(s) for which a Class B is designated, is depicted by a solid magenta line. 

Mode C is required but not depicted for operations within and above all Class C up to 10,000' MSL. Enroute Mode C requirements (at and above 10,000' MSL except in airspace at and below 2500' AGL) are not depicted. See FAR 91.215 and the AIM.

**FAR 93** Airports and heliports where Federal Aviation Regulation (FAR 93) special air traffic rules and airport traffic patterns apply are shown by "boxing" the airport name.


**FAR 91** Airports where fixed wing special visual flight rules operations are prohibited (FAR 91) are shown with the type "NO SVFR" above the airport name.

**National Security Areas** are indicated on VFR charts with a broken magenta line. Unauthorized aircraft are requested to remain clear of these areas.

**Terminal Radar Service Areas (TRSAs)** are shown in their entirety, symbolized by a screened black outline of the entire area including the various sectors within the area.

The outer limit of the entire TRSA is a continuous screened black line. The various sectors within the TRSA are symbolized by slightly narrower screened black lines.

Each sector altitude is identified in solid black color by the MSL ceiling and floor values of the respective sector, eliminating the last two digits. A leader line is used when the altitude values must be positioned outside the respective sectors because of space limitations. The TRSA name is shown near the north position of the TRSA as follows: PALM SPRINGS TRSA . Associated frequencies are listed in a table on the chart border.

**Military Training Routes (MTRs)** are shown on Sectionals and TACs. They are identified by the route designator: ← IR21 . Route designators are shown in solid black on the route centerline, positioned along the route for continuity. The designator IR or VR is not repeated when two or more routes are established over the same airspace, e.g., IR201-205-227. Routes numbered 001 to 099 are shown as IR1 or VR99, eliminating the initial zeros. Direction of flight along the route is indicated by small arrowheads adjacent to and in conjunction with each route designator.

The following note appears on Sectionals and TACs covering the conterminous United States.

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.

Since these routes are subject to change every 56 days, and the charts are reissued every 6 months, you are cautioned and advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

Routes with a change in the alignment of the charted route centerline will be indicated in the Aeronautical Chart Bulletin of the Airport/Facility Directory.

Military Pilots refer to Area Planning AP/1B Military Training Route North and South America for current routes.

There are IFR (IR) and VFR (VR) routes as follows:

Route identification:

a. Routes at or below 1500' AGL (with no segment above 1500') are identified by four-digit numbers; e.g., VR1007, etc. These routes are

generally developed for flight under Visual Flight Rules.

b. Routes above 1500' AGL (some segments of these routes may be below 1500') are identified by three-digit or less numbers; e.g., IR21, VR302, etc. These routes are developed for flight under Instrument Flight Rules.

MTRs can vary in width from four to 16 miles. Detailed route width information is available in the Flight Information Publication (FLIP) AP/1B (a DoD publication), or in the Digital Aeronautical Chart Supplement (DACS) produced by NACO.

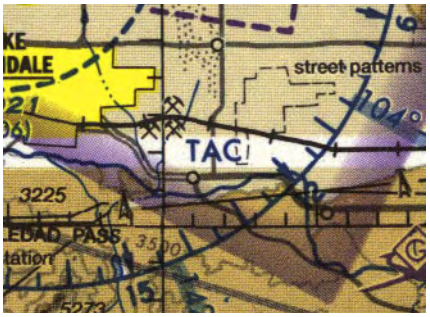
**Special Military Activity** areas are indicated on the Sectionals by a boxed note in black type. The note contains radio frequency information for obtaining area activity status.

SPECIAL MILITARY ACTIVITY
CONTACT MOBILE FSS
ON 123.6
FOR ACTIVITY STATUS

## TERMINAL AREA CHART (TAC) COVERAGE

TAC coverage is shown on appropriate Sectionals by a 1/4" masked line as indicated below. Within this area, pilots should use TACs which provide greater detail and clarity of information. A note to this effect appears near the masked boundary line.

LOS ANGELES TERMINAL AREA
Pilots are encouraged to use the Los Angeles VFR Terminal Area Chart for flights at or below 10,000′




## INSET COVERAGE

Inset coverage is shown on appropriate Sectionals by a 1/8" masked line as indicated below. A note to this effect appears near the masked boundary line.

INDIANAPOLIS INSET
See inset chart for additional detail

INDIANAPOLIS INSET
See inset chart on the St. Louis Sectional for additional information


## CHART TABULATIONS

**Airport Tower Communications** are provided in a columnized tabulation for all tower-controlled airports that appear on the respective chart. Airport names are listed alphabetically. If the airport is military, the type of airfield, e.g., AAF, AFB, NAS, is shown after the airfield name. In addition to the airport name, tower operating hours, primary VHF/UHF local Control Tower (CT), Ground Control (GND CON), and Automatic Terminal Information Service (ATIS) frequencies, when available, will be given. An asterisk (*) indicates that the part-time tower frequency is remoted to a collocated full-time FSS for use as Local Airport Advisory (LAA) when the tower is closed. Airport Surveillance Radar (ASR) and/or Precision Approach Radar (PAR) procedures are listed when available.

**Approach Control Communications** are provided in a columized tabulation listing Class B, Class C, Terminal Radar Service Areas (TRSA) and Selected Radar Facilities when available. Primary VHF/UHF frequencies are provided for each facility. Sectorization occurs when more than one frequency exists and/or approach direction dependent. Availability of service hours is also provided

**Special Use Airspace (SUA)** information is comprised of Prohibited, Restricted, Alert, and Warning Areas. They are presented in blue and listed numerically for U.S. and other countries. Restricted, Danger and Advisory Areas for Canada are tabulated separately in blue. A tabulation of Military Operations Areas (MOA) that appear on the chart are presented in magenta and listed alphabetically. All are supplemented with altitude, time of use and the controlling agency/contact facility, and its frequency, when available. The controlling agency will be shown when the contact facility and frequency data is unavailable..

Airports with control towers are indicated on the face of the chart by the letters CT followed by the primary VHF local control frequency (ies). Information for each tower is listed in the table below. Operational hours are local time. The primary VHF and UHF local control frequencies are listed. An asterisk (*) indicates the part-time tower frequency is remoted to a collocated full-time FSS for use as Local Airport Advisory (LAA) during hours the tower is closed. The primary VHF and UHF ground control frequencies are listed.

Automatic Terminal Information Service (ATIS) frequencies shown on the face of the chart are primary 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.

Frequencies (VHF/UHF)

| CONTROL TOWER | OPERATES | TWR FREQ | GND CON | ATIS | ASR/PAR |
|---|---|---|---|---|---|
| AIRBORNE | 0700 MON-1800 SAT<br>0600-1800 SUN | 119.475 | 121.6 | 124.925 | |
| BLUE GRASS | CONTINUOUS | 119.1 257.8 | 121.9 | 126.3 | |
| BOLTON | 0730-1930 | 128.1 | 121.3 (E) 121.8 (W) | | ASR/PAR |
| CHARLOTTESVILLE-ALBEMARLE | 0600-2300 | 124.5 338.275 | 121.9 338.275 | 118.425 | PAR |
| CINCINNATI/NORTHERN KENTUCKY INTL | CONTINUOUS<br>Runway dependent | 118.3 (RWYS 18R/36L & 09/27)<br>118.975 360.85 (RWY 18L/36R) | 121.3 (EAST)<br>121.7 (WEST) | 134.375 ARR<br>135.3 DEP | ASR |
| COX DAYTON INTL | CONTINUOUS | 119.9 257.8 | 121.9 | 125.8 | |
| EASTERN WV RGNL/ SHEPHERD | 0700-2200 TUE-THU<br>0700-1600 FRI-SAT<br>1300-1800 SUN<br>O/T BY NOTAM | 124.3 236.6 | 121.8 275.8 | | |

Airport Name

Radar Instrument Approach available

Hours of Operation (local time)

Approach direction dependent

Frequencies (VHF/UHF)

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

| FACILITY | FREQUENCIES | SERVICE AVAILABILITY |
|---|---|---|
| CINCINNATI CLASS B | VHF 119.7 (RWY 09/27 090°-269°) (RWY 18R/36L 180°-359°)<br>UHF 123.875 (RWY 09/27 270°-089°) (RWY 18L/36R 360°-179°)<br>363.15 | CONTINUOUS |
| CHARLESTON CLASS C | 124.1 269.125 (NORTH)<br>119.2 269.125 (SOUTH) | CONTINUOUS |
| COLUMBUS CLASS C | 120.2 317.775 (280°-099°)<br>132.3 279.6 (100°-279°) | CONTINUOUS |
| DAYTON CLASS C | 127.65 294.5 (360°-090°)<br>118.85 327.1 (091°-180°)<br>134.45 316.7 (181°-359°) | CONTINUOUS |
| BRISTOL TRSA | 134.425 349.0 (047°-227°)<br>125.5 317.5 (228°-046°)<br>O/T 127.85 371.85 ZTL CNTR | 0600-2400 local time |
| HUNTINGTON TRSA | 119.75 257.8 (SOUTH)<br>132.95 257.8 (NORTH) | CONTINUOUS |
| PERKINSON/BAAF RADAR | 118.75 353.9 | CONTINUOUS |

Airspace Name

Sectors for VHF and UHF traffic

Radar Approach Control

O/T indicates Other times



## SPECIAL USE AIRSPACE ON SECTIONAL CHART

Unless otherwise noted altitudes are MSL and in feet. Times are local. "TO" an altitude means "To and including." FL – Flight level. NO A/G – No air to ground communications. Contact nearest FSS 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, A–ALERT, W–WARNING, MOA– MILITARY OPERATIONS AREA

| NUMBER | ALTITUDE | TIME OF USE | CONTROLLING AGENCY/ CONTACT FACILITY | FREQUENCIES |
|---|---|---|---|---|
| R-6602 A | TO BUT NOT INCL 4000 | CONTINUOUS MAY 1-SEP 15<br>†24 HRS IN ADVANCE | WASHINGTON CNTR | 118.75 377.1 |
| R-6602 B | 4000 TO BUT NOT INCL 11,000 | BY NOTAM 24 HRS IN ADVANCE | WASHINGTON CNTR | 118.75 377.1 |
| R-6602 C | 11,000 TO BUT NOT INCL 18,000 | BY NOTAM 24 HRS IN ADVANCE | WASHINGTON CNTR | 118.75 377.1 |

VHF/UHF

## CANADA R–RESTRICTED, D–DANGER AND A–ADVISORY AREA

| NUMBER | LOCATION | ALTITUDE | TIME OF USE | CONTROLLING AGENCY |
|---|---|---|---|---|
| CYR754 | CONFEDERATION BRIDGE, PE | TO 500 | CONTINUOUS | |
| CYD734 | HALIFAX, NS | TO FL 200 | OCCASIONAL BY NOTAM | MONCTON ACC |
| CYA702 (P) | GREENWOOD, NS | TO 500 | CONT DAYLIGHT | |
| CYA752 (M) | LIVERPOOL, NS | TO FL 280 | CONT DAYLIGHT MON-FRI EXC HOL† | MONCTON ACC |

Restricted
Danger
Advisory

A-Acrobatic F-Aircraft Test Area H-Hang Gliding M-Military Operations P-Parachuting S-Soaring T-Training

| MOA NAME | ALTITUDE* | TIME OF USE† | CONTROLLING AGENCY/ CONTACT FACILITY | FREQUENCIES |
|---|---|---|---|---|
| BRUSH CREEK | 100 AGL TO BUT NOT INCL 5000 | 0800-2200 MON-SAT | INDIANAPOLIS CNTR | 134.0 135.57 |
| BUCKEYE | 5000 | 0800-2200 MON-FRI<br>0800-1600 SAT & SUN | INDIANAPOLIS CNTR | 134.0 135.57 |
| EVERS | 1000 AGL | SR-SS BY NOTAM | WASHINGTON CNTR | |
| FARMVILLE | 300 AGL TO 5000 | 0800-1700 MON-FRI | WASHINGTON CNTR | 118.75 377.1 |
| PICKETT 1 | 500 AGL TO 6000 | SR-SS INTERMITTENT | WASHINGTON CNTR | 118.75 377.1 |

VHF/UHF

*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.

Sunrise to Sunset