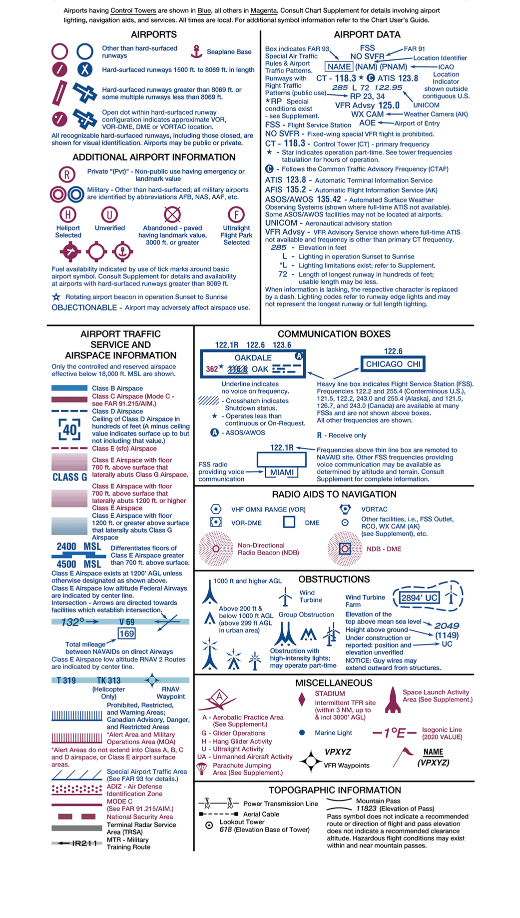
# SAN ANTONIO
## LEGEND

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.



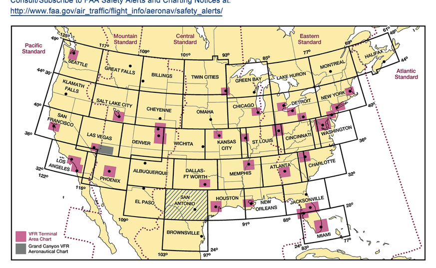

# SAN ANTONIO SECTIONAL
SECTIONAL AERONAUTICAL CHART SCALE 1:500,000

Federal Aviation Administration


106TH EDITION EFFECTIVE 0901Z 5 NOV 2020
TO 0901Z 25 FEB 2021

Includes airspace amendments effective 5 NOV 2020
and all other aeronautical data received by 2 OCT 2020


Information on this chart will change; consolidated major updates of chart changes are available every 56 days in the CHART SUPPLEMENT Aeronautical Chart Bulletin section (online at http://faa.gov/air_traffic/flight_info/aeronav/). Also consult appropriate NOTICES TO AIRMEN (NOTAMs) and other FLIGHT INFORMATION PUBLICATIONS (FLIPs) for the latest changes. 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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### PLOTTING DIRECT ROUTE ON NORTH/SOUTH SIDE

There are approximately two minutes of latitude overlap between the north and south sides of each sectional chart. To plot a course line from one side to the other, the user must first locate two pair of corresponding latitude tick marks, one pair on each side of the chart and follow the steps below.

STEP 1 - Draw a horizontal line (MATCH LINE) between each pair of corresponding latitude tick marks on each side of the chart just to the left or right of where your plot line crosses. (Figure 1)

STEP 2 - Decide which side of the chart has the departure or destination point closer to the edge of the chart. On that side, line up a blank piece of paper along the MATCH LINE (the paper should be completely on the chart, not extending beyond its edge).

STEP 3 - Slide the paper sideways left or right so that a side edge of the paper aligns with the departure or destination point (POINT A). Make a MARK A on an edge of the paper where it meets that point.

STEP 4 - Without moving the paper, on the same edge as MARK A, extend a short line on the chart from the corner of the paper where it meets the MATCH LINE out to the edge of the chart. Make that LINE B.

STEP 5 - Turn the chart over and transfer the end of LINE B to the other side, and extend it straight to the MATCH LINE. (Figure 2)

STEP 6 - Take the sheet of paper with MARK A on it and align the (top or bottom) edge of the paper with the MATCH LINE and side edge with LINE B with the bulk of the sheet extending off of the chart. Plot a line from MARK A to the departure or destination point (POINT B).

STEP 7 - Where your plot line crosses the MATCH LINE make a MARK C. Extend a line straight from that mark to the edge of the chart.

STEP 8 - Turn the chart back over and transfer MARK C to that side and extend it to the MATCH LINE. Plot a line from MARK C to the destination. (Figure 3)

### 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

### CONTROL TOWER FREQUENCIES ON SAN ANTONIO SECTIONAL 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 |
|---|---|---|---|---|---|
| AUSTIN-BERGSTROM INTL | CONTINUOUS | 121.0 281.5 | 121.9 348.6 | 124.4 | |
| AUSTIN EXEC | 0600-2200 | 120.3 | 119.45 | | |
| GEORGETOWN | 0700-2200 | 120.225 | 119.125 | 118.6 | |
| HOOD AHP | 0800-2400 MON-FRI EXC HOL O/T CTC ROBERT GRAY TWR | 119.65 269.45 | 133.85 225.4 | | |
| KELLY | CONTINUOUS | 124.3 322.35 | 121.8 289.4 | 120.45 273.5 | |
| LAUGHLIN AFB | 0700-1900 MON-FRI 1500-1759 SUN EXC HOL | 125.2 307.375 | 275.8 | 114.4 269.9 | |
| LONGHORN AUX | 0900-0100 MON-FRI O/T BY NOTAM | 138.55 237.5 | 142.8 238.2 | | |
| MIDLAND INTL AIR & SPACE | 0600-2400 | 118.7 273.45 | 121.9 348.6 | 126.8 235.975 | ASR |
| NEW BRAUNFELS RGNL | 0700-1900 | 127.05 285.4 | 120.75 | 119.325 | |
| RANDOLPH AFB | 0700-1900 MON-FRI CLSD FED HOL | 128.25 294.7 | 119.65 275.8 | 290.525 | |
| HANGOVER | CTL RWY 15R/33L DUR STU TRNG | 120.5 291.1 128.25 294.7 | 124.75 353.75 | 327.8 | |
| ROBERT GRAY AAF | CONTINUOUS | 120.75 285.5 | 121.8 279.5 | 124.9 | ASR/PAR |
| SAN ANGELO RGNL/MATHIS | 0700-2100 | 118.3 284.7 | 121.9 348.6 | 128.45 319.0 | ASR |
| SAN ANTONIO INTL | CONTINUOUS | 119.8 257.8 | 121.9 348.6 | 118.9 | |
| SAN MARCOS RGNL | 0700-1900 | 126.825 | 120.125 | 120.825 | |
| SHORTHORN AUX | 0900-0100 MON-FRI O/T BY NOTAM | 138.55 237.5 | 238.2 | | |
| STINSON | 0700-2200 | 118.2 379.9 | 121.7 379.9 | 128.8 | |
| TSTC WACO | 0700-2300 | 124.0 255.7 | 121.7 | | ASR |
| VICTORIA RGNL | 0700-2200 | 126.075 257.95 | 120.525 239.25 | 119.025 | |
| WACO RGNL | 0600-2400 | 119.3 257.8 | 121.9 | 123.85 | ASR |

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

| FACILITY | FREQUENCIES | SERVICE AVAILABILITY |
|---|---|---|
| AUSTIN CLASS C | 127.225 317.65 (E) 119.0 370.85 (W) 120.875 270.25 (S) | CONTINUOUS |
| LAUGHLIN AFB CLASS C | 119.6 259.1 O/T 125.75 346.4 HOUSTON CNTR | 0700-1900 MON-FRI 1500-1759 SUN EXC HOL; O/T CLASS G |
| MIDLAND CLASS C | 121.1 256.875 (137°-240°) 124.6 290.4 (241°-136°) O/T 133.1 298.95 FORT WORTH CNTR | 0600-2400; O/T CLASS E |
| SAN ANTONIO CLASS C | 124.45 335.625 (360°-090°) 128.05 318.1 (091°-140°) 118.05 353.5 (141°-270°) 125.1 307.0 (271°-359°) | CONTINUOUS |
| HOOD AAF | 120.075 323.15 | CONTINUOUS |
| KELLY | 118.05 353.5 | CONTINUOUS |
| ROBERT GRAY AAF | 120.075 323.15 | CONTINUOUS |

### SPECIAL USE AIRSPACE ON SAN ANTONIO SECTIONAL 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.

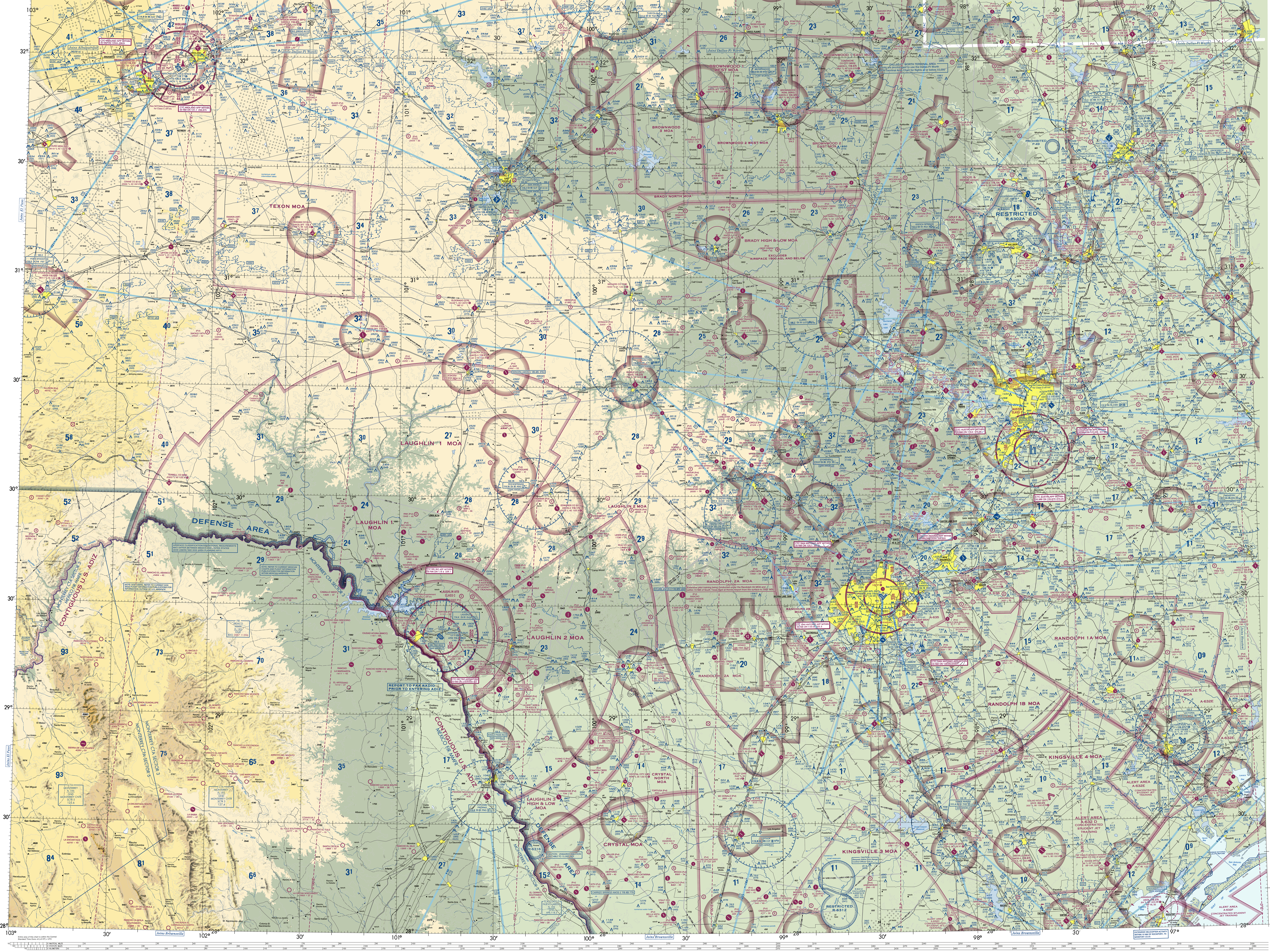
#### U.S. P-PROHIBITED, R-RESTRICTED, W-WARNING, A-ALERT, MOA-MILITARY OPERATIONS AREA

| NUMBER | ALTITUDE | TIME OF USE | CONTROLLING AGENCY/ CONTACT FACILITY | FREQUENCIES |
|---|---|---|---|---|
| P-49 | TO 2000 | CONTINUOUS | NO A/G | |
| R-6302 A | TO 30,000 | CONTINUOUS | HOUSTON CNTR | |
| R-6302 B | TO 11,000 | 1800-0600 MON-SAT† | HOUSTON CNTR | |
| R-6302 C, D | TO 30,000 | 0700-1900 MON-FRI† | HOUSTON CNTR | |
| R-6312 | TO FL 230 | SR-SS† | HOUSTON CNTR | |
| R-6316 | TO 15,000 | CONTINUOUS | HOUSTON CNTR | |
| A-632 B | TO BUT NOT INCL FL 180 | 0700-2400 | NO A/G | |
| A-632 C | TO BUT NOT INCL FL 180 | SR-2400 MON-FRI | NO A/G | |
| A-632 D | 6000 TO BUT NOT INCL 11,000 | SR-2400 MON-FRI 1400-2400 SUN† | NO A/G | |
| A-632 E | 6000 TO BUT NOT INCL 9000 | SR-2400 MON-FRI 1400-2400 SUN† | NO A/G | |
| A-632 F | 3000 AGL TO BUT NOT INCL FL 180 | 0700-2400 MON-SAT | NO A/G | |
| A-633 A | TO 7000 | SR-SS MON-FRI | NO A/G | |
| A-633 B | TO 4000 | SR-SS MON-FRI | NO A/G | |
| A-635 | 1500 TO 4000 | SR TO 3 HRS AFTER SS MON-FRI | NO A/G | |
| A-638 | TO 3000 | SR-SS MON-FRI | 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 |
|---|---|---|---|---|
| BRADY HIGH | 6000 | SR-2200 MON-FRI | HOUSTON CNTR | |
| BRADY LOW | 500 AGL TO BUT NOT INCL 6000 | SR-2200 MON-FRI | HOUSTON CNTR | |
| BRADY NORTH | 3600 | SR-2200 SUN-FRI | HOUSTON CNTR | |
| BROWNWOOD 1 EAST, WEST | 7000 | 0700-2200 | FORT WORTH CNTR | 127.45 290.3 135.37 354.05 |
| BROWNWOOD 2 EAST, WEST | 7000 | 0700-2200 | FORT WORTH CNTR | 127.45 290.3 135.37 354.05 |
| BROWNWOOD 3, 4 | 13,000 | 0700-2200 | FORT WORTH CNTR | 127.45 290.3 135.37 354.05 |
| CRYSTAL | 6000 | 0700-1800 | HOUSTON CNTR | |
| CRYSTAL NORTH | 6000 | 0800-0930 & 1300-1430 TUE-FRI | HOUSTON CNTR | |
| GRAY | 2000 TO 10,000 | 0700-1900 MON-FRI | HOUSTON CNTR | |
| HOOD | 2000 TO 10,000 | 0700-1900 MON-FRI | HOUSTON CNTR | |
| HOOD HIGH | 10,000 | BY NOTAM 48 HRS IN ADVANCE | HOUSTON CNTR | |
| KINGSVILLE 3 | 8000 | SR-2400 MON-FRI 1400-2400 SUN | HOUSTON CNTR | |
| KINGSVILLE 4, 5 | 9000 | SR-2400 MON-FRI 1400-2400 SUN | HOUSTON CNTR | |
| LAUGHLIN 1 | 9000 | 0600-2000 MON-FRI | HOUSTON CNTR | |
| LAUGHLIN 2 | 7000 | 0600-2000 MON-FRI | HOUSTON CNTR | |
| LAUGHLIN 3 HIGH | 15,000 | 0600-2000 MON-FRI | HOUSTON CNTR | |
| LAUGHLIN 3 LOW | 7000 TO BUT NOT INCL 15,000 | 0600-2000 MON-FRI | HOUSTON CNTR | |
| RANDOLPH 1A | 8000 | SR-SS MON-FRI | HOUSTON CNTR | |
| RANDOLPH 1B | 7000 | SR-SS MON-FRI | SAN ANTONIO TRACON | |
| RANDOLPH 2A | 9000 | SR-SS MON-FRI | HOUSTON CNTR | |
| RANDOLPH 2B | 14,000 | SR-SS MON-FRI | HOUSTON CNTR | |
| TEXON | 6000 | SR-SS MON-FRI | HOUSTON 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.




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.

Lambert Conformal Conic Projection Standard Parallels 25°20' and 30°40'
Horizontal Datum: North American Datum of 1983 (World Geodetic System 1984)

Entire area of this chart is within the Central Standard Time Zone +6 (+5 DT) = UTC

CONTOUR INTERVAL 500 feet
Intermediate contours 250 feet
Auxiliary contours 100 feet
HIGHEST TERRAIN elevation is 8960 feet located at 28° 58'N - 102° 37'W
Spot elevation .......... 4254
Approximate elevation .......... x 3200

CONVERSION OF ELEVATIONS

FOR PROCUREMENT: For digital products, visit http://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/ For a list of approved FAA Print Providers, visit our website at: http://www.faa.gov/air_traffic/flight_info/aeronav/print_providers/

NOTE: REFER TO CURRENT MEXICAN CHARTS AND FLIGHT INFORMATION PUBLICATIONS FOR INFORMATION WITHIN MEXICAN AIRSPACE

AIRSPACE CLASSIFICATION/OPERATIONAL REQUIREMENTS MAY DIFFER BETWEEN MEXICO AND UNITED STATES (DOD USERS, SEE DOD AREA PLANNING AP/1)

NOTE: DOD USERS, REFER TO CURRENT DOD (NGA) FLIGHT INFORMATION PUBLICATIONS FOR INFORMATION OUTSIDE OF U.S. AIRSPACE

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

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 guard 243.0 and follow the interceptor visual ICAO signals. Be advised that non-compliance may result in the use of force.

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, you are cautioned and advised to contact Flight Service 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 Chart Supplement.

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

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

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.

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) an 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

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.

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.

HIGH DENSITY HELICOPTER ACTIVITY AREA FREQUENCIES
ROCKPORT, TX 123.05

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://www.faa.gov/go/ais prior to contacting us with a 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.