VFR FLYWAY

VFR TERMINAL AREA CHART PHOENIX

PHOENIX

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 emergency or 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.

Runways with Right Traffic Patterns (public use)

FSS · NO SVFR · FAR 91 · Location Identifier · NAME (NAM) (PNAM) · ICAO Location Indicator shown outside contiguous U.S.

CT - 118.3 ★ Ⓒ ATIS 123.8

285 L 72 122.95

RP 23, 34

VFR Advsy 125.0 · UNICOM

WX CAM · Weather Camera (AK)

AOE · Airport of Entry

*RP Special conditions exist - see Supplement.

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.)

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 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

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

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

Prohibited, Restricted, and Warning Areas; Canadian Advisory, Danger, and Restricted 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.)

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

122.1R 122.6 123.6 · OAKDALE · 362 ★ 116.8 OAK · 122.6 CHICAGO CHI

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 122.2 and 255.4 (Conterminous U.S.), 121.5, 122.2, 243.0 and 255.4 (Alaska), and 121.5, 126.7, and 243.0 (Canada) are available at many 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

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

Elevation of the top above mean sea level 2049

Height above ground (1149)

Under construction or reported; position and elevation unverified UC

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

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 (See Supplement.)

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.

PHOENIX TAC

VFR TERMINAL AREA CHART SCALE 1:250,000

Federal Aviation Administration

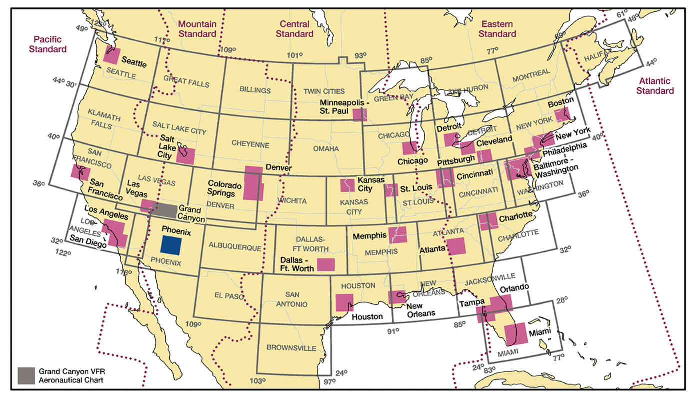
EFFECTIVE 0901Z **25 FEB 2021**

TO 0901Z **22 APR 2021**

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.

FAA Product ID: TPHX

NSN 7641014099659

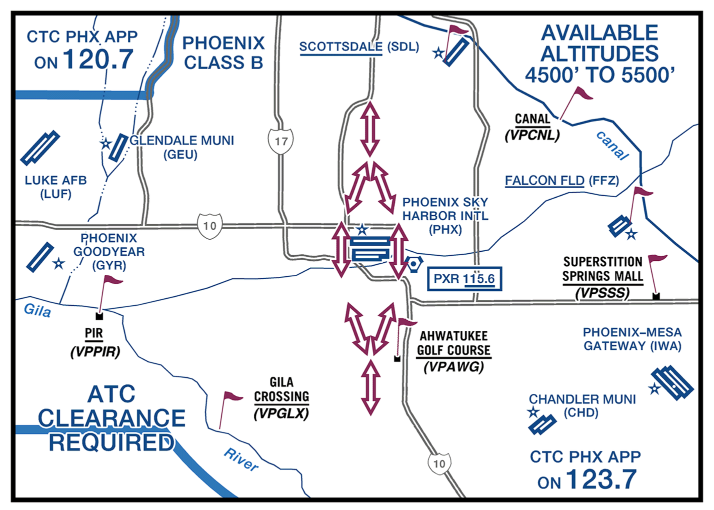
NGA REF. NO. VFRTAPHOENIX

EFF. DATE 21056

VFR TRANSITION ROUTE (ATC CLEARANCE REQUIRED) ALTITUDE ASSIGNED BY ATC

EAST/WEST ROUTE

VFR ONLY



REQUIREMENTS OF FAR 91.215 AND 91.131 SHALL BE MET

EAST/WEST ROUTE: The VFR Transition Route over Phoenix Sky Harbor Intl (PHX) is based upon the runway in use. If unfamiliar with the transition, advise ATC and expect radar vector.

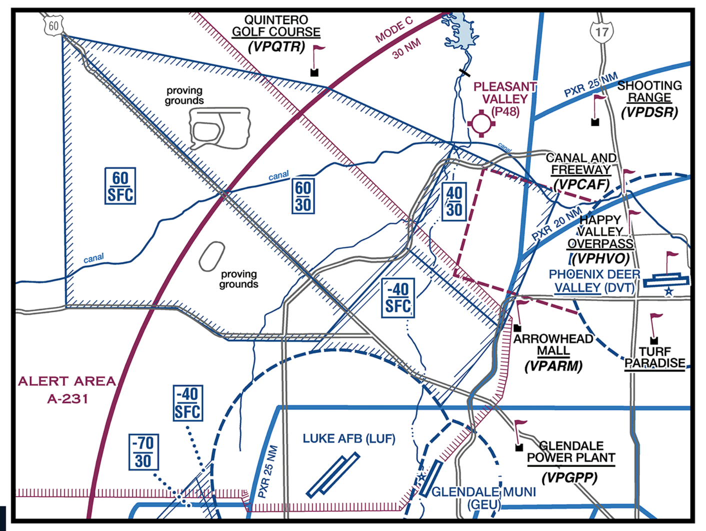
EAST ROUTE: Altitude as assigned by ATC. Aircraft should fly between the Hohokam Expressway (State Route 143) and the approach end of Runways 26 and 25R/25L.

WEST ROUTE: Altitude as assigned by ATC. Aircraft should fly between Interstate 10 and the approach end of Runways 8 and 7R/7L.

REMAIN CLEAR OF THE CLASS B UNTIL RECEIVING SPECIFIC ATC APPROVAL TO ENTER

LUKE SATR NORTH AREA

CONTACT 118.15



LUKE AFB SPECIAL AIR TRAFFIC RULE REQUIREMENTS OF FAR 93.177 MUST BE MET

The Luke AFB Special Air Traffic Rule Terminal Area is described in FAR 93.176 and is active during official daylight hours Monday through Friday while Luke pilot flight training is underway, as broadcast on the local Automatic Terminal Information Service (ATIS) from LUF, DVT, GEU, and GYR towers

OPERATIONS IN THE SPECIAL AIR TRAFFIC RULE (SATR) AREA: Unless otherwise authorized by Air Traffic Control (ATC), no person may operate an aircraft in flight within the SATR Area unless the following requirements are met:

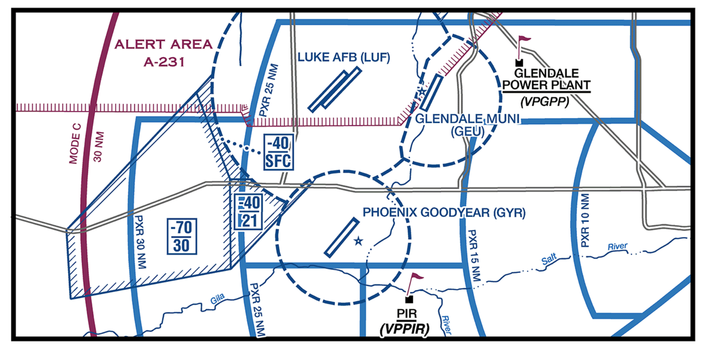
1. Before operating within the SATR Area, that person establishes radio contact with the Luke RAPCON; and
2. That person maintains two-way radio communication with the Luke RAPCON or an appropriate ATC facility while within the SATR Area.

Requests for deviation from the provisions of this section apply only to aircraft not equipped with an operational radio. The request must be submitted at least 24 hours before the proposed operation to Luke RAPCON at 623-856-6448.

NOTE: When the Luke AFB Special Air Traffic Rule is in effect, pilots operating NORTH of Luke AFB must contact LUKE APP on 118.15, pilots operating SOUTH of Luke AFB must contact LUKE APP on 125.45, prior to entering the SATR Area.

LUKE SATR SOUTH AREA

CONTACT 125.45



Entire area of this chart is within the Mountain Standard Time Zone +7 = UTC.

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

FACILITY	FREQUENCIES	SERVICE AVAILABILITY
PHOENIX CLASS B	120.7 239.0 (319°-057° BELOW 7500') 119.2 281.45 (319°-057° 7500' AND ABOVE) 124.9 353.8 (058°-118° BELOW 10,500') 126.8 269.6 (058°-118° 10,500' AND ABOVE) 123.7 363.0 (119°-138° BELOW 7500') 124.1 256.9 (119°-138° 7500' TO 14,500') 126.8 269.6 (119°-138° ABOVE 14,500') 123.7 363.0 (139°-191° BELOW 8500') 126.8 269.6 (139°-191° 8500' AND ABOVE) 124.1 256.9 (192°-263° 7500' TO 12,500') 126.8 269.6 (192°-263° ABOVE 12,500')	CONTINUOUS
LUKE AFB	118.15 363.125 (N) 125.45 263.125 (S)	0630-2230 MON-THU 0630-1830 FRI; CLSD HOL & AETC FAMILY DAYS

CONTROL TOWER FREQUENCIES ON PHOENIX 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
CHANDLER MUNI	0600-2100	126.1 (ARR N, W) 126.1 (DEP RWY 04L/22R) 133.1 (ARR S, E) 133.1 (DEP RWY 04R/22L)	124.4	128.325	
FALCON FLD	0530-2100 15 MAY-15 AUG 0600-2100 16 AUG-14 MAY	124.6	121.3	118.25	
GILA BEND AF AUX	0730-2330 MON-FRI 0800-1659 SAT-SUN CLSD HOL	127.75 257.65	233.7		
GLENDALE MUNI	0600-2030 MON-FRI 0700-1900 SAT-SUN	121.0	118.0	119.425	
LUKE AFB	0630-2230 MON-THU 0630-1830 FRI CLSD HOL & AETC FAMILY DAYS	119.1 379.9	133.175 335.8	134.925 269.9	
PHOENIX DEER VALLEY	0600-2400	118.4 (ARR 070°-250°) 118.4 (DEP RWY 07R/25L) 120.2 (ARR 251°-069°) 120.2 (DEP RWY 07L/25R)	121.8	126.5	
PHOENIX GOODYEAR	0600-2100	120.1 239.3	121.7	118.35	
PHOENIX-MESA GATEWAY	0500-2400	120.6 289.4	128.25 275.8	133.5 270.275	
PHOENIX SKY HARBOR INTL	CONTINUOUS	118.7 278.8 (RWY 08/26) 120.9 254.3 (RWY 07R/25L & 07L/25R)	119.75 (N) 132.55 (S) 269.2	127.575	
SCOTTSDALE	0600-2100	119.9	121.6	118.6	

SPECIAL USE AIRSPACE ON PHOENIX 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
R-2301 E	TO FL 800	0630-2400†	ALBUQUERQUE CNTR	
R-2304	TO FL 240	0630-2400 MON-SAT†	ALBUQUERQUE CNTR	
R-2305	TO FL 240	0630-2400 MON-SAT†	ALBUQUERQUE CNTR	
R-2310 A	TO 10,000	INTERMITTENT BY NOTAM 48 HRS IN ADVANCE	ALBUQUERQUE CNTR	
R-2310 B	10,000 TO 17,000	INTERMITTENT BY NOTAM 48 HRS IN ADVANCE	ALBUQUERQUE CNTR	
R-2310 C	17,000 TO 35,000	INTERMITTENT BY NOTAM 48 HRS IN ADVANCE	ALBUQUERQUE CNTR	
A-231	500 AGL TO 6500	CONTINUOUS	LUKE APP	118.15

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
GLADDEN 1	7000 OR 5000 AGL WHICHEVER IS HIGHER	0600-1900 MON-FRI	ALBUQUERQUE CNTR	128.45
OUTLAW	8000 OR 3000 AGL WHICHEVER IS HIGHER	0700-1800 MON-FRI 1800-2200 MON-FRI BY NOTAM INTERMITTENT SAT-SUN BY NOTAM	ALBUQUERQUE CNTR	125.4
SELLS 1	10,000	0600-1900 MON-FRI	ALBUQUERQUE CNTR	125.4

*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.

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

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

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.

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

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.

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/

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.

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

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.

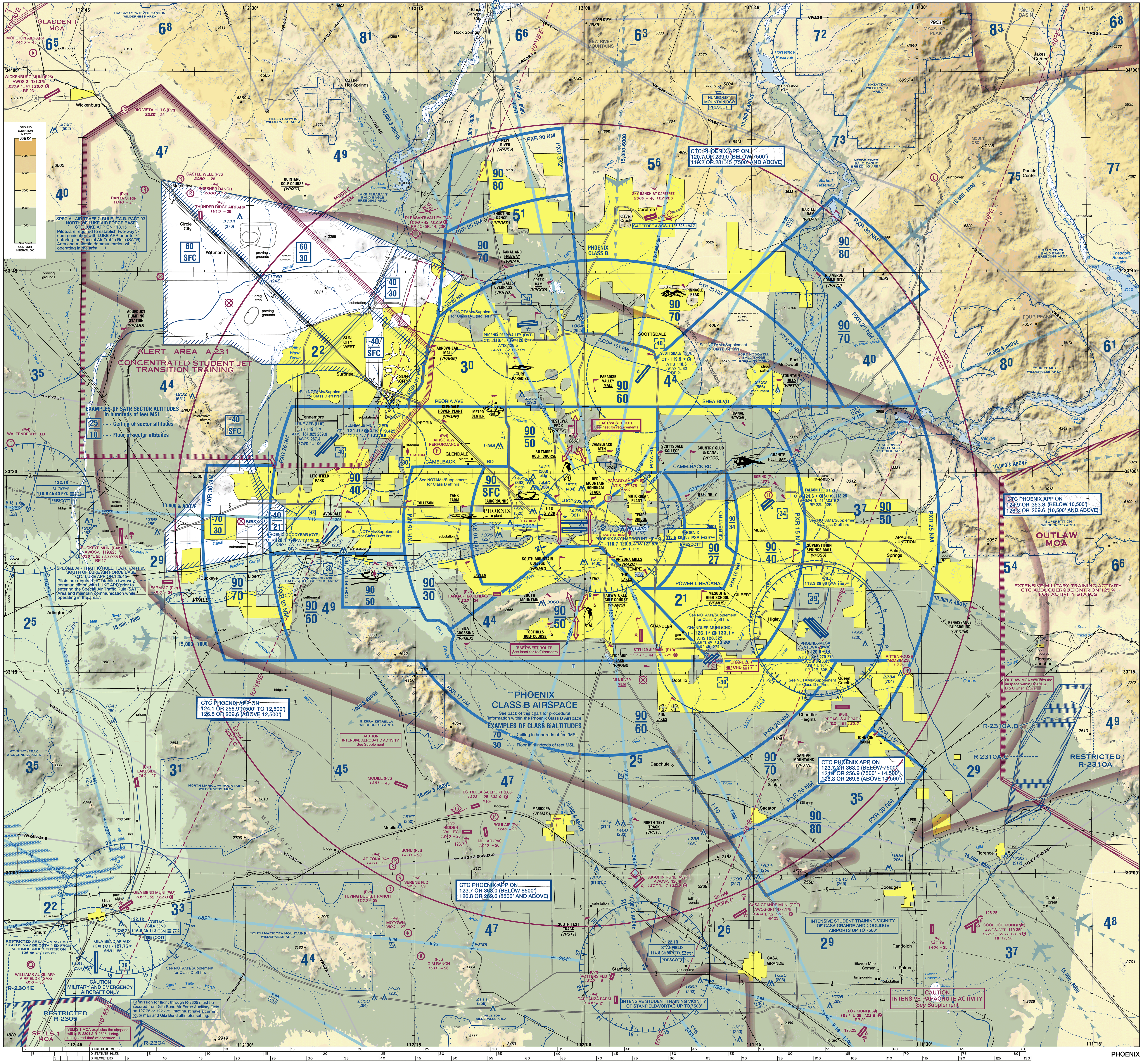
CAUTION: Severe turbulence may occur over rugged terrain. See AIM.

CAUTION: Unmanned Aircraft Systems (UAS) may be approved to operate above critical infrastructure including obstacles and linear features such as high-voltage powerlines and railroads 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) 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



PHOENIX

VFR FLYWAY PLANNING CHART

PHOENIX

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; Canadian Advisory, Danger, and Restricted 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.

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

IFR Departure Routes

IFR Arrival Routes

IFR Arrival/Departure Routes

OBSTRUCTIONS (Selected)

2049

MISCELLANEOUS

Navigation Reference Point

N33° 56.33' W120° 36.91'

TOPOGRAPHIC INFORMATION

12256 — Mountain Top or Peak and Spot Elevation

THIS CHART IDENTIFIES VFR FLYWAYS DESIGNED TO HELP VFR PILOTS AVOID MAJOR CONTROLLED TRAFFIC FLOWS. IT DEPICTS MULTIPLE VFR ROUTINGS THROUGHOUT THE PHOENIX 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 PHOENIX 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.

VFR TRANSITION ROUTES

THIS CHART ALSO IDENTIFIES VFR TRANSITION ROUTES IN THE PHOENIX CLASS B AIRSPACE. OPERATION ON THESE ROUTES REQUIRES ATC AUTHORIZATION FROM PHOENIX APPROACH CONTROL. UNTIL AUTHORIZATION IS RECEIVED, REMAIN OUTSIDE CLASS B AIRSPACE. DEPICTION OF THESE ROUTES IS TO ASSIST PILOTS IN POSITIONING THE AIRCRAFT IN AN AREA OUTSIDE THE CLASS B AIRSPACE WHERE ATC CLEARANCE CAN NORMALLY BE EXPECTED WITH MINIMAL OR NO DELAY. ON INITIAL CONTACT, ADVISE ATC OF POSITION, ALTITUDE, ROUTE NAME DESIRED, AND DIRECTION OF FLIGHT. REFER TO CURRENT PHOENIX VFR TERMINAL AREA CHART FOR USER REQUIREMENTS.

PHOENIX 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 Phoenix 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.

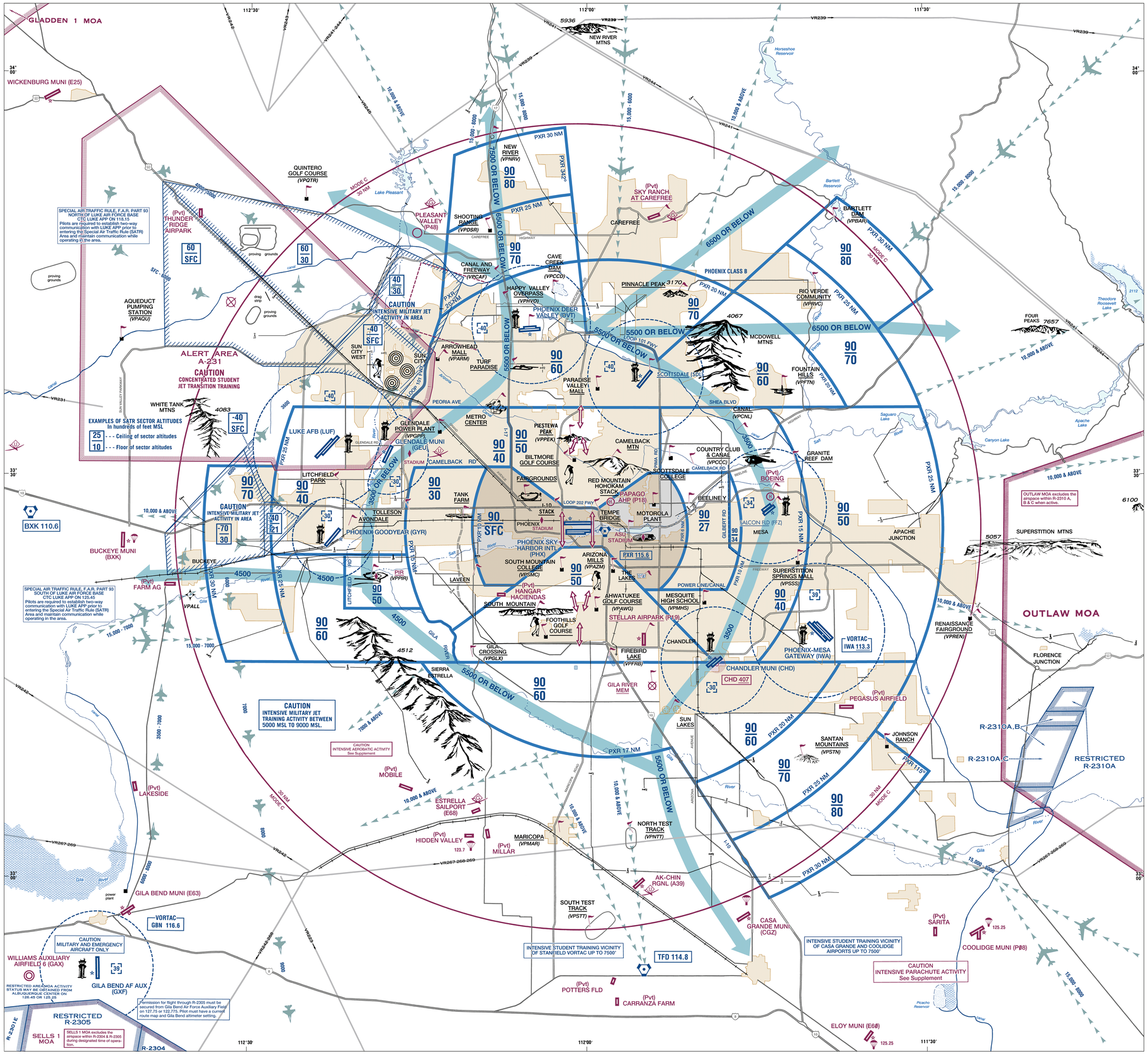
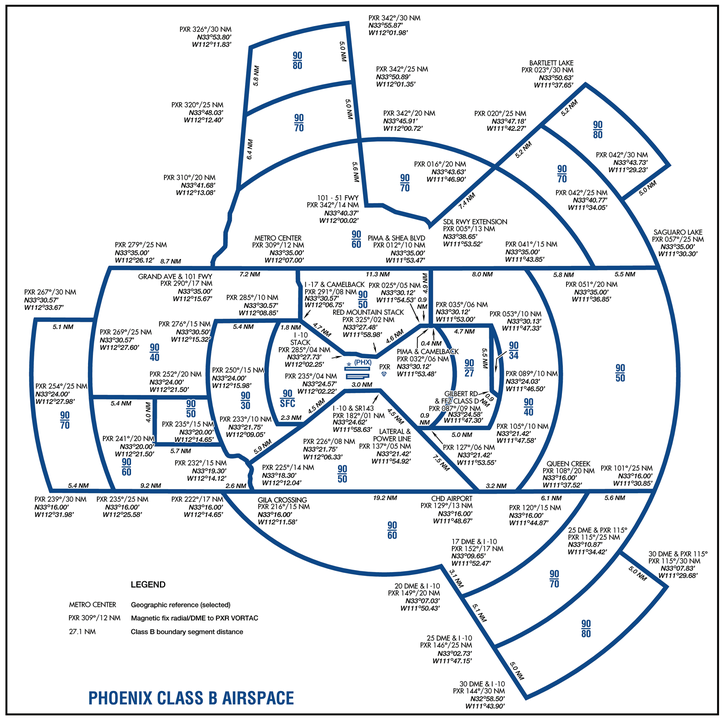
ATC PROCEDURES

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.

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.

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.