Airports having Control Towers are shown in Blue, all others in Magenta. Consult Airport/Facility Directory (A/FD) 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. to 8069 ft. in length
Hard-surfaced runways greater than 8069 ft. or some multiple runways less than 8069 ft.
Open dot within hard-surfaced runway configuration indicates approximate VOR, VOR-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. DoD users, for complete airport information consult DoD FLIP.
Heliport Selected · Unverified · Abandoned - paved having landmark value, 3000 ft. or greater

Services - fuel available and field tended during normal working hours depicted by use of ticks around basic airport symbol. (Normal working hours are Mon thru Fri 10:00 A.M. to 4:00 P.M.) Consult A/FD for service availability at airports with hard-surfaced runways greater than 8069 ft.
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
NAME (NAM) (PNAM) — Location Identifier; ICAO Location Indicator shown outside contiguous U.S.
CT - 118.3 ★
ATIS 123.8
285 L 72 U — UNICOM
VFR Advsy 125.0
AOE — Airport of Entry
Consult A/FD for UNICOM frequency.

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.
ATIS 123.8 - Automatic Terminal Information Service
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 Airport/Facility Directory.
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 airway and reserved airspace effective below 18,000 ft. MSL are shown on this chart.
Class B Airspace
Class C Airspace (Mode C - see FAR 91.215/AIM.)
Class E Airspace low altitude Federal Airways are indicated by center line. 132° V 69
Class E Airspace low altitude RNAV 2 Routes are indicated by center line. T 319 TK 313 (Helicopter Only)
Prohibited, Restricted, and Warning Areas; Canadian Advisory, Danger, and Restricted Areas
Alert Area and MOA - Military Operations Area
Special Airport Traffic Area (See FAR 93 for details.)
ADIZ - Air Defense Identification Zone
MODE C (See FAR 91.215/AIM.)

COMMUNICATION BOXES

122.1R 122.6 123.6 OAKDALE 362 ★ 335.4 OAK
122.1R CHICAGO CHI
Underline indicates no voice on frequency.
Crosshatch indicates Shutdown status.
★ - Operates less than continuous or On-Request.
A - ASOS/AWOS
H - HIWAS
FSS radio providing voice communication 122.1R MIAMI
Heavy line box indicates Flight Service Station (FSS). Frequencies 121.5, 122.2, 243.0 and 255.4 (Canada - 121.5, 126.7 and 243.0) are available at many FSSs and are not shown above boxes. All other frequencies are shown.
Certain FSSs provide Airport Advisory Service, see A/FD.
R - Receive only
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 Airport/Facility Directory for complete information.

RADIO AIDS TO NAVIGATION

VHF OMNI RANGE (VOR)
VORTAC
VOR-DME
Other facilities, i.e., FSS Outlet, RCO, etc.
Non-Directional Radio Beacon (NDB)
NDB - DME

OBSTRUCTIONS

1000 ft. and higher AGL
Below 1000 ft. AGL
Wind Turbine
Group Obstruction
Obstruction with high-intensity lights; may operate part-time.
2894' UC Wind Turbine Farm
2049 — Elevation of the top above mean sea level
(1149) — Height above ground
UC — Under construction or reported; position and elevation unverified
NOTICE: Guy wires may extend outward from structures.

MISCELLANEOUS

— 1°E — Isogonic Line (2015 VALUE)
Marine Light

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.

REPORTING CHART ERRORS

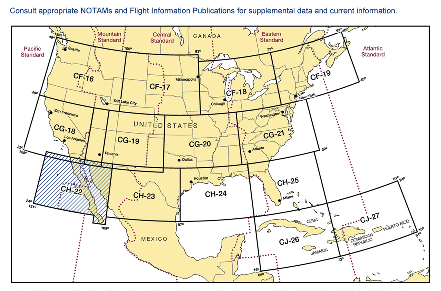
You are requested to inform us of chart errors and/or additions that come to your attention while using this chart. Frequently asked questions (FAQs) are answered on our website at http://faa.gov/go/ais. See the FAQs prior to contacting via toll free number or email. Telephone toll free at 1-800-638-8972, or email us at 9-AMC-Aerochart@faa.gov or mail to: FAA, Aeronautical Information Services, Customer Operations Team, 1305 East-West Highway, SSMC 4, Suite 4400, Silver Spring, MD 20910-3281.

SOUTH ◀ **CH-22 WAC** ▶ NORTH
WORLD AERONAUTICAL CHART SCALE 1:1,000,000

Federal Aviation Administration

22ND EDITION EFFECTIVE 0901Z **17 SEP 2015**
TO 0901Z **14 SEP 2017**
Includes aeronautical data received by **25 JUN 2015**

Consult appropriate NOTAMs and Flight Information Publications for supplemental data and current information.



PUBLISHED IN ACCORDANCE WITH INTERAGENCY AIR CARTOGRAPHIC COMMITTEE SPECIFICATIONS AND AGREEMENTS, APPROVED BY: DEPARTMENT OF DEFENSE * FEDERAL AVIATION ADMINISTRATION

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

FAA Product ID: WCH22
NSN 7641014813275
NGA REF. NO. WACCXCH22
EFF. DATE 15260

CONTROL TOWER FREQUENCIES ON CH-22 WORLD AERONAUTICAL CHART

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 Airport Advisory Service (AAS) 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.
O/T indicates other times.

CONTROL TOWER	OPERATES	TWR FREQ	GND CON	ATIS	ASR/PAR
CABO SAN LUCAS INTL	0600-2000	118.75			
CIUDAD OBREGON INTL	0600-1800	118.3		127.6	
GEN ALBERTO L SALINAS CARRANZA	CONTINUOUS	119.75			
GEN IGNACIO P GARCIA INTL	0600-2400	118.7		127.7	
GEN JOSE MARIA YANEZ INTL	0700-1900	118.6			
GEN MANUEL MARQUEZ DE LEON INTL	0700-2300	118.1		127.9	
LORETO INTL	0700-1900	118.4			
LOS CABOS INTL	0700-2100	118.9		127.6	
PUERTO PENASCO MAR DE CORTES INTL	0800-1659	118.85			
RYAN	0600-2000	125.8	118.2		
SAN FELIPE INTL	0700-1700	118.5			
SIERRA VISTA-LIBBY AAF	0000 MON-2300 FRI EXC HOLS O/T BY NOTAM	124.95 284.75	121.7 268.7	134.75 265.7	ASR/PAR
TUCSON INTL	CONTINUOUS	118.3 257.8	124.4 348.6	123.8 279.65	
VALLE DEL FUERTE INTL	0700-2100	118.8			

SPECIAL USE AIRSPACE ON CH-22 WORLD AERONAUTICAL 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-2301 W	TO FL 800	CONTINUOUS	YUMA RANGE CON	124.15
R-2303 A	TO 15,000	0700-1700 MON-FRI †24 HRS IN ADVANCE	ALBUQUERQUE CNTR	
R-2303 B	8,000 TO FL 300	0700-1700 MON-FRI †24 HRS IN ADVANCE	ALBUQUERQUE CNTR	
R-2303 C	15,000 TO FL 300	INTERMITTENT BY NOTAM 24 HRS IN ADVANCE	ALBUQUERQUE CNTR	
R-2312	TO BUT NOT INCL 15,000	CONTINUOUS	ALBUQUERQUE CNTR	
W-289 S	UNLIMITED	INTERMITTENT BY NOTAM	LOS ANGELES CNTR	132.15
W-291	TO FL 800	INTERMITTENT BY NOTAM	LOS ANGELES CNTR	132.15 (EAST OF 120 W)

MEXICO P-PROHIBITED, R-RESTRICTED

NUMBER	LOCATION	ALTITUDE	TIME OF USE	CONTROLLING AGENCY
MMP 401	MAZATLAN	TO 5000	CONTINUOUS	DGAC SENEAM
MMP 416	PENAL	TO 5000	CONTINUOUS	DGAC SENEAM
MMR 400	FOCAS	TO 10,000	BY NOTAM	DGAC SENEAM
MMR 407		1000 AGL TO 4000	BY NOTAM	DGAC SENEAM
MMR 408		3000 AGL TO 19,000	BY NOTAM	DGAC SENEAM
MMR 409		1000 AGL TO 4000	BY NOTAM	DGAC SENEAM
MMR 410		500 AGL TO 4500	BY NOTAM	DGAC SENEAM
MMR 411		1000 AGL TO 19,000	BY NOTAM	DGAC SENEAM
MMR 412		1000 AGL TO 9000	BY NOTAM	DGAC SENEAM
MMR 413		TO 9000	BY NOTAM	DGAC SENEAM
MMR 414		1000 AGL TO 6000	BY NOTAM	DGAC SENEAM
MMR 415		TO 1500	CONTINUOUS	DGAC SENEAM

MOA NAME	ALTITUDE*	TIME OF USE†	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
FUZZY	100 AGL TO BUT NOT INCL 10,000	0700-1900	ALBUQUERQUE CNTR	125.4
RUBY 1	10,000	0600-1900 MON-FRI	ALBUQUERQUE CNTR	125.4
SELLS 1	10,000	0600-1900 MON-FRI	ALBUQUERQUE CNTR	125.4
SELLS LOW	3000 AGL TO BUT NOT INCL 10,000	0600-1900 MON-FRI	ALBUQUERQUE CNTR	125.4
TOMBSTONE A, B	500 AGL TO BUT NOT INCL 14,500	0600-2100 MON-FRI	ALBUQUERQUE CNTR	134.45
TOMBSTONE C	14,500	0600-2100 MON-FRI	ALBUQUERQUE 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: Severe turbulence may occur over rugged terrain. See AIM.

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.

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 5-6-2 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.

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

PLOTTING DIRECT ROUTE ON NORTH/SOUTH SIDE

There are approximately two minutes of latitude overlap between the north and south sides of each sectional/WAC 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 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 sheet 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)

Figure 1: NORTH SIDE · Sheet of paper · POINT A · MARK A · MATCH LINE · Overlap area · LINE B
Figure 2: same latitude · MARK A · LINE B (transferred) · Overlap area · MATCH LINE · MARK C · SOUTH SIDE · POINT B
Figure 3: NORTH SIDE · POINT A · LINE B · MARK C (transferred) · MATCH LINE · Overlap area

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

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

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

NAUTICAL MILES · STATUTE MILES · KILOMETERS

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For digital products, visit http://faacharts.faa.gov.

CONTOUR INTERVAL 1000 feet
HIGHEST TERRAIN elevation is 10145 feet located at 30° 59' N - 115° 22'W
Spot elevation .... • 4254
Approximate elevation .... × 3200

GROUND ELEVATIONS IN FEET: 10145 · 9000 · 7000 · 5000 · 3000 · 2000 · 1000 · Sea Level
CONTOUR INTERVAL 1000'