MCGRATH
LEGEND

SOUTH — NORTH

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

Fuel - available Mon thru Fri 10:00 A.M. to 4:00 P.M. depicted by use of ticks around basic airport symbol. Consult Supplement for details and for 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; NO SVFR; FAR 91; Location Identifier; NAME (NAM) (PNAM); ICAO Location Indicator shown outside contiguous U.S.

Runways with Right Traffic Patterns (public use) — 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
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 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.

Total mileage between NAVAIDs on direct Airways. Class E Airspace low altitude RNAV 2 Routes are indicated by center line. RNAV Waypoint.

- Prohibited, Restricted, 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.)
- National Security Area
- Terminal Radar Service Area (TRSA)
- MTR - Military Training Route

COMMUNICATION BOXES

Underline indicates no voice on frequency. Crosshatch indicates Shutdown status. ★ - Operates less than continuous or On-Request. Ⓐ - ASOS/AWOS; Ⓗ - HIWAS; Ⓣ - TWEB. FSS radio providing voice communication.

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.

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 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 (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); Group Obstruction; Wind Turbine; Wind Turbine Farm; 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 & incl 3000' AGL)
- Marine Light
- Space Launch Activity Area (See Supplement.)
- Isogonic Line (2015 VALUE)
- VFR Waypoints (See chart tabulation for latitude/longitude.)

TOPOGRAPHIC INFORMATION

Power Transmission Line; Lookout Tower 618 (Elevation Base of Tower); Mountain Pass (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.

MCGRATH SECTIONAL

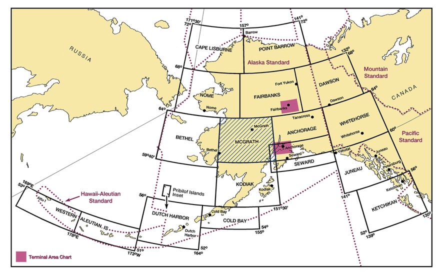
SECTIONAL AERONAUTICAL CHART SCALE 1:500,000

Federal Aviation Administration

58TH EDITION EFFECTIVE 0901Z 21 JUL 2016
TO 0901Z 20 JUL 2017

Includes airspace amendments effective 21 JUL 2016
and all other aeronautical data received by 26 MAY 2016

Information on this chart will change; consolidated major updates of charts are available every 56 days in the CHART SUPPLEMENT Aeronautical Chart Bulletin section (online at http://faa.gov/go/ais). 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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NSN 7641014100111
NGA REF. NO. SECXXMCGRATH
EFF. DATE 16203

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 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)

CONTROL TOWER FREQUENCIES ON MC GRATH 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
BETHEL	0700-2200 1 APR—31 OCT 0700-2000 1 NOV—31 MAR	118.7	121.7	119.8	
KENAI	0600-2200 1 MAY—30 SEP 0700-2100 1 OCT—30 APR	121.3 239.3	118.75	133.35	

SPECIAL USE AIRSPACE ON MC GRATH 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

MOA NAME	ALTITUDE*	TIME OF USE†	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
GALENA	1000 AGL	INTERMITTENT 0800-1800 MON-FRI	ANCHORAGE CNTR	127.0 290.2
NAKNEK 1	3000 AGL	1000-1500 MON-FRI	ANCHORAGE CNTR	132.75 282.35
NAKNEK 2	3000 AGL	1000-1500 MON-FRI	ANCHORAGE CNTR	118.8 351.8
STONY A	100 AGL	0800-1800 MON-FRI	ANCHORAGE CNTR	133.7 279.6
STONY B	2000 AGL	0800-1800 MON-FRI	ANCHORAGE CNTR	133.7 279.6
SUSITNA	10,000 OR 5000 AGL WHICHEVER IS HIGHER	INTERMITTENT 0800-1800 MON-FRI	ANCHORAGE CNTR	125.55 254.3

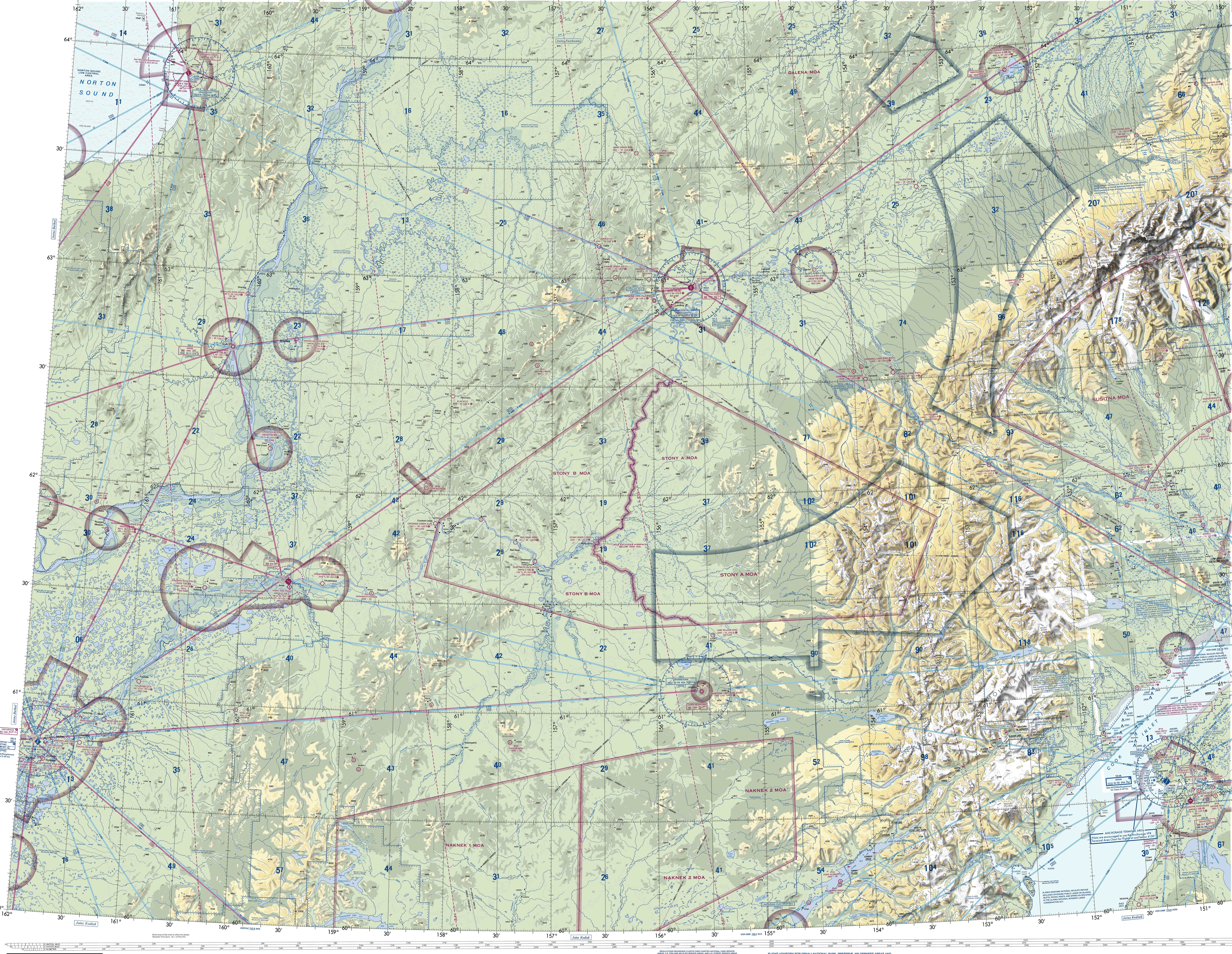
*Altitudes indicate floor of MOA. All MOAs extend to but do not include FL 180 unless otherwise indicated in tabulation or on chart.
†Other times contact USAF SUAIS or FAA FSS, see SUAIS in Supplement Alaska.

Lambert Conformal Conic Projection Standard Parallels 57° 20' and 62° 40'
Horizontal Datum: North American Datum of 1983 (World Geodetic System 1984)

CONTOUR INTERVAL 1000 feet
Intermediate contours 500 feet
Auxiliary contours 250 feet
HIGHEST TERRAIN elevation is 20320 feet located at 63° 04'N - 151° 00'W
Spot elevation 4254
Approximate elevation . . . . x 3200

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

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



Entire area of this chart is within the Alaska Standard Time Zone +9 (+8 DT)=UTC.

NAUTICAL MILES / STATUTE MILES / KILOMETERS

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 page for contact info 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.

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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.

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.

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.

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

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.

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

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

CAUTION: Before landing fixed-wing aircraft on the lands or waters within the boundaries of lands administered by the National Park Service (NPS) and U.S. Fish and Wildlife Service (FWS), pilots should check with the respective agencies for any closures that may be in effect. The landing of helicopters is prohibited on the lands and waters within the boundaries of the lands administered by the NPS, FWS, and U.S. Forest Service (USFS) Wilderness areas. Contact information for any portions of these areas contained on this Sectional Chart can be found in the chart margin. For contact information for all these areas in Alaska, see Supplement (Area Notices).

All aircraft are requested to maintain a minimum altitude of 2,000 feet above the surface of lands and waters administered by the NPS, FWS, or USFS Wilderness areas. 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 uppermost rim of a canyon or valley.

Pilots are warned that it is unlawful at any altitude to use an aircraft to harass any wildlife (16 USC 742j-1; 50 CFR Part 19). Harass is defined to mean disturb, worry, molest, rally, concentrate, harry, chase, drive, herd or torment.

Alaska Maritime NWR - Homer, AK - (907) 235-6546
Innoko NWR - McGrath, AK - (907) 524-3251
Kenai NWR - Soldotna, AK - (907) 262-7021
Koyukuk/Nowitna NWR - Galena, AK - (907) 656-1231
Togiak NWR - Dillingham, AK - (907) 842-1063
Yukon Delta NWR - Bethel, AK - (907) 543-3151
Denali National Park and Preserve - (907) 683-2294
Lake Clark National Park and Preserve - (907) 781-2218 / (907) 644-3626 (Chief Ranger)

Boundary of National Park Service areas, U.S. Fish and Wildlife Service areas, U.S. Forest Service areas.

FLIGHT ADVISORY FOR DENALI NATIONAL PARK, PRESERVE, WILDERNESS AREAS AND DENALI MASSIF

Heavy fixed wing and helicopter activity over Denali National Park, Preserve, Wilderness Areas and Denali Massif.

Surface to 16,000 feet.
Operations 24 hours daily.

Aircraft operating in the vicinity of Denali National Park, Preserve, Wilderness Areas and Denali Massif should utilize 122.725 NORTH/123.65 SOUTH as traffic advisory frequencies. Position reports should be given in the following format:

A. Preface with "Denali Traffic Advisory"
B. Identification
C. Position (as closely as can be defined)
D. Altitude
E. Next prominent position
F. ETA to the next position