# VFR AERONAUTICAL CHART SYMBOLS

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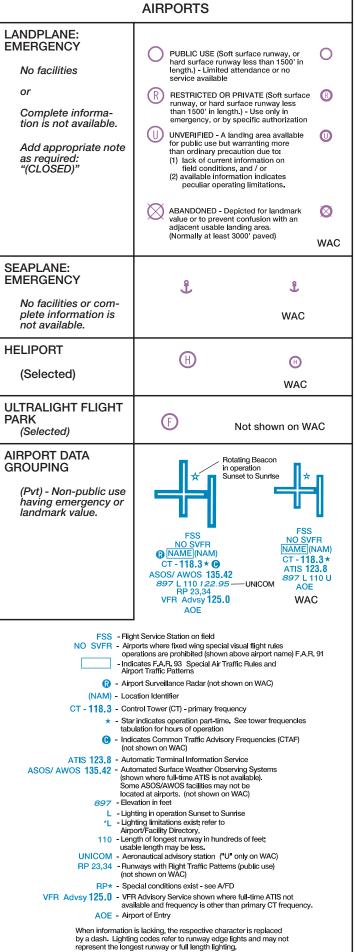
## HELICOPTER ROUTE CHARTS

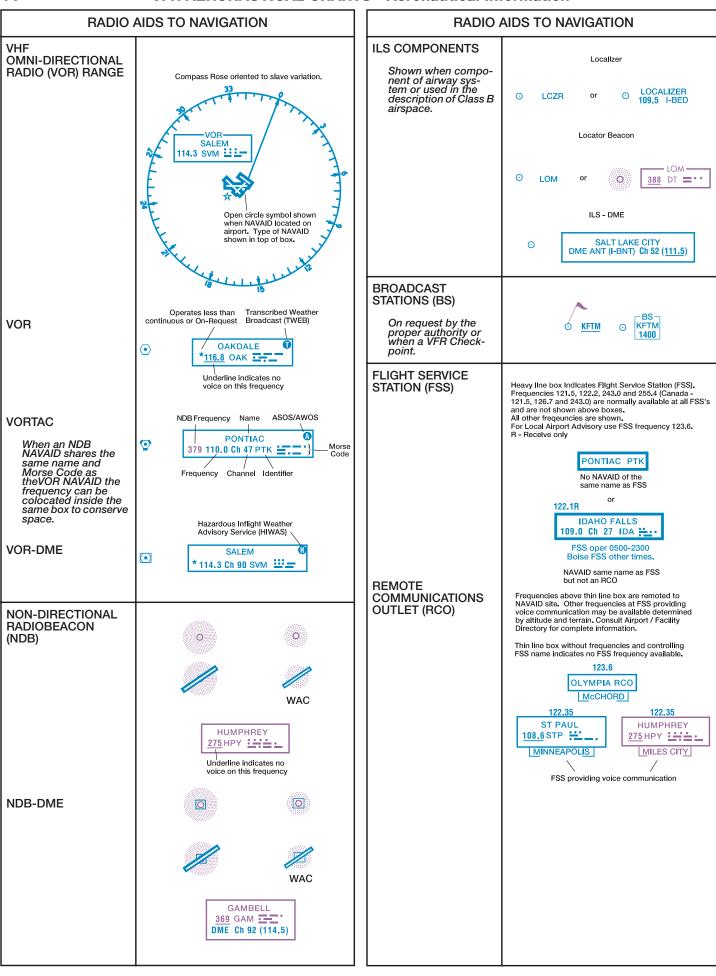
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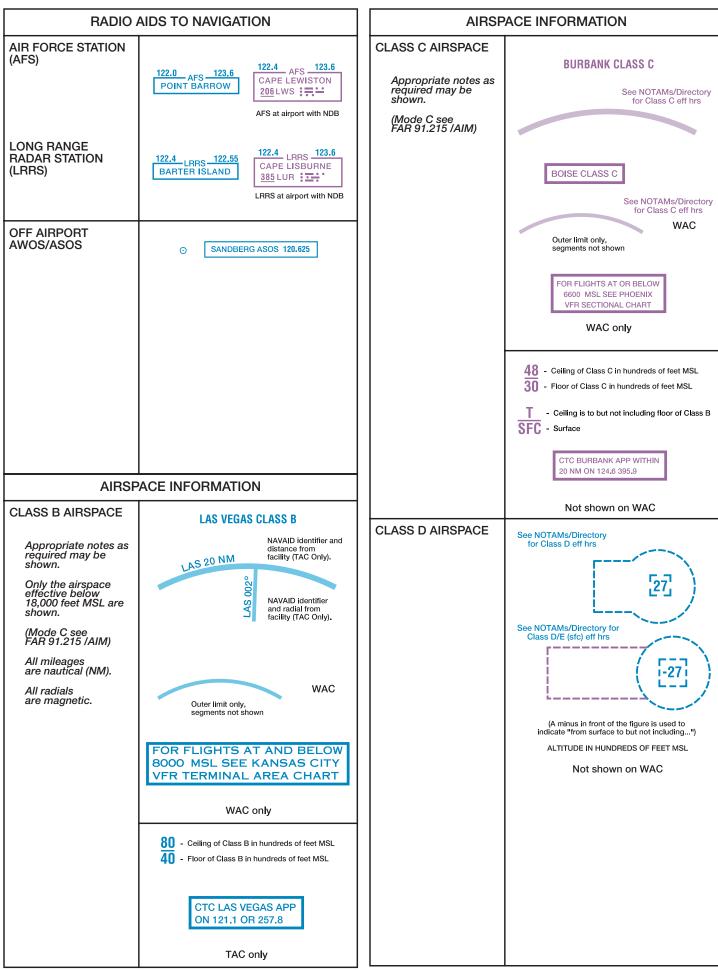
### **GENERAL INFORMATION**

Symbols shown are for World Aeronautical Charts (WACs), Sectional Aeronautical Charts (Sectionals), Terminal Area Charts (TACs), VFR Flyway Planning Charts and Helicopter Route Charts. When a symbol is different on any VFR chart series, it will be annotated as such (e.g. WAC or Not shown on WAC).

	AIRPORTS			
LANDPLANE: CIVIL			LANDPLANE: EMERGENCY	
Airports having con- trol towers (CT) are	<b>\Q</b>	<b>\$</b>	No facilities	
shown in blue, all oth- ers are shown in magenta.	<b>\Q</b>	<b>\Q</b>	or	
All recognizable run- ways, including some			Complete informa- tion is not available.	
which may be closed, are shown for visual identification pur- poses.		*	Add appropriate note as required: "(CLOSED)"	
Refueling and repair facilities for normal traffic.	<b>*</b>	<b>*</b>		
Runway patterns will be depicted at air-				
ports with at least one hard surface runway 1500´ or greater in			SEAPLANE: EMERGENCY	
length.		<b>Ø</b> *	No facilities or com- plete information is not available.	
		WAC	HELIPORT	
			(Selected)	
SEAPLANE: CIVIL	•	<b>③</b>	ULTRALIGHT FLIGHT PARK (Selected)	
	<b>①</b>	<b>(</b> ) WAC	AIRPORT DATA GROUPING	
			(Pvt) - Non-public use having emergency or	
LANDPLANE:	•	•	landmark value.	
CIVIL-MILITARY	•	<b>•</b>		
	*			
	**	*		
		概	FSS - Fligh NO SVFR - Airpo open	_
		WAC	- Indic Airpo R - Airpo	)
			(NAM) - Loca CT - 118.3 - Cont	
			* - Stari	i
LANDPLANE: MILITARY		0	(not s	6
Refueling and repair facilities not indi-	0	0	ATIS 123.8 - Autor ASOS/ AWOS 135.42 - Autor (show Some	
cated.			897 - Eleva L - Light	į
	هي	22	*L - Light Airpo 110 - Leng	
	***	***	usabl UNICOM - Aero RP 23,34 - Runv	ı
			(not s	5
	¥ <b>™</b>	WAC	VFR Advsy 125.0 - VFR avails AOE - Airpo	
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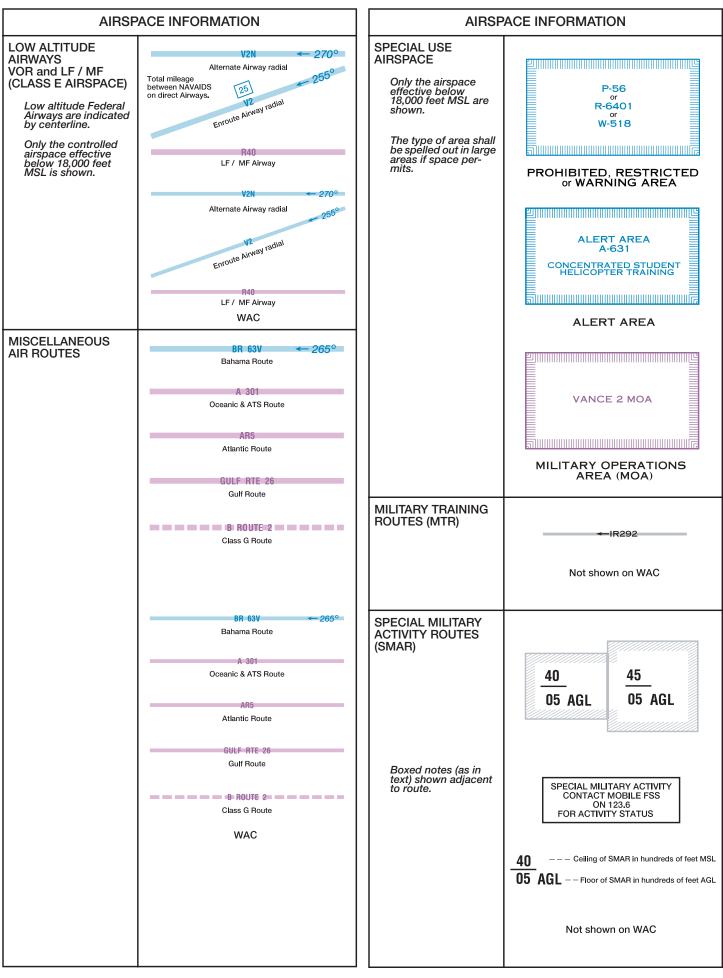


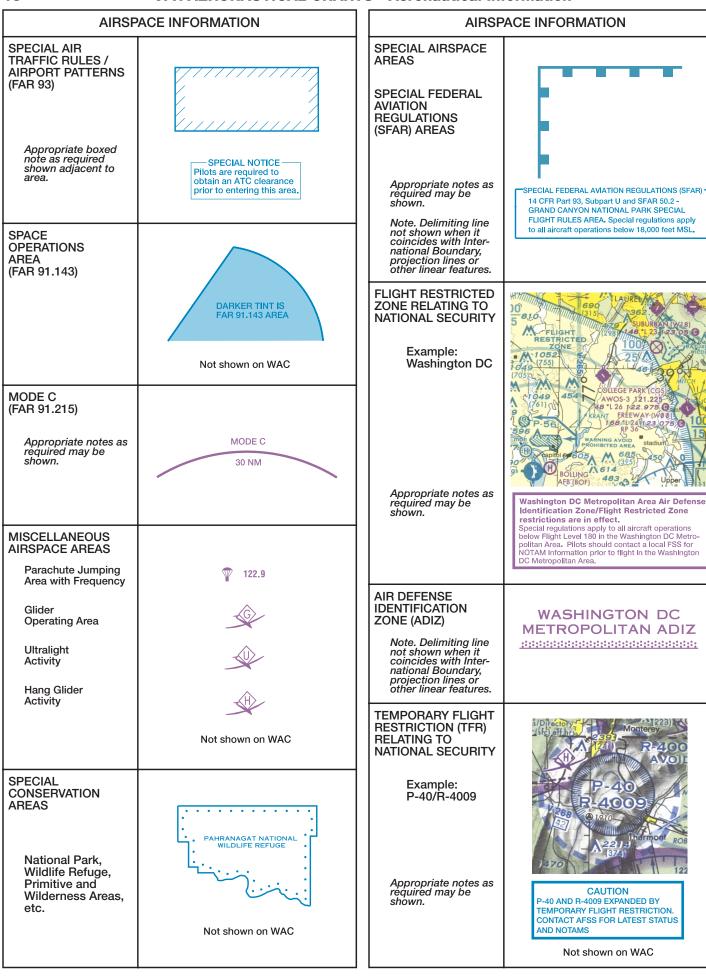


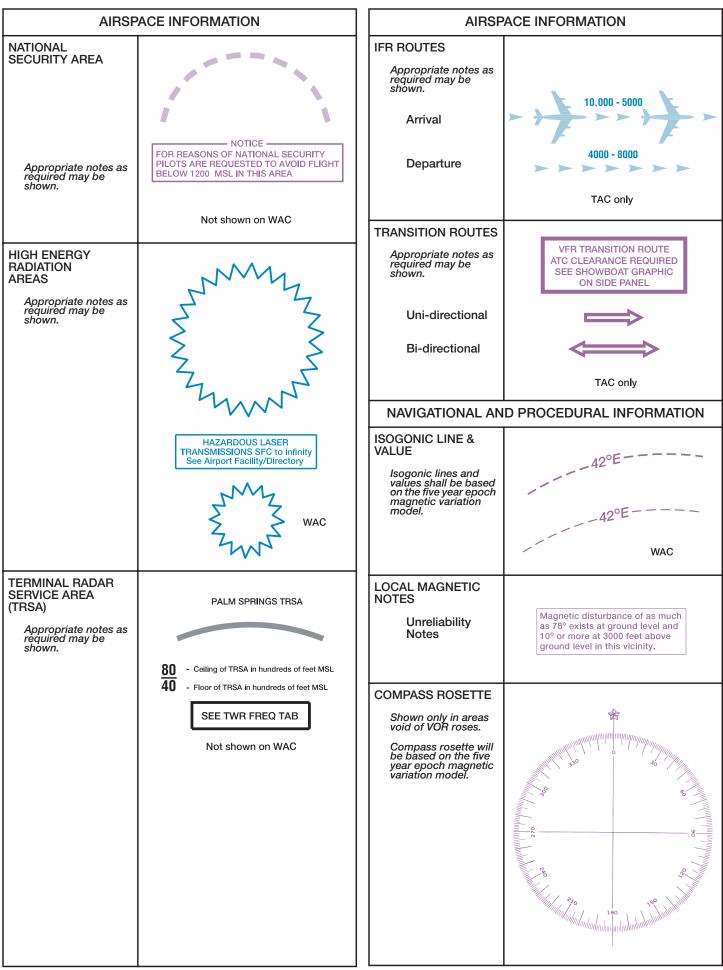


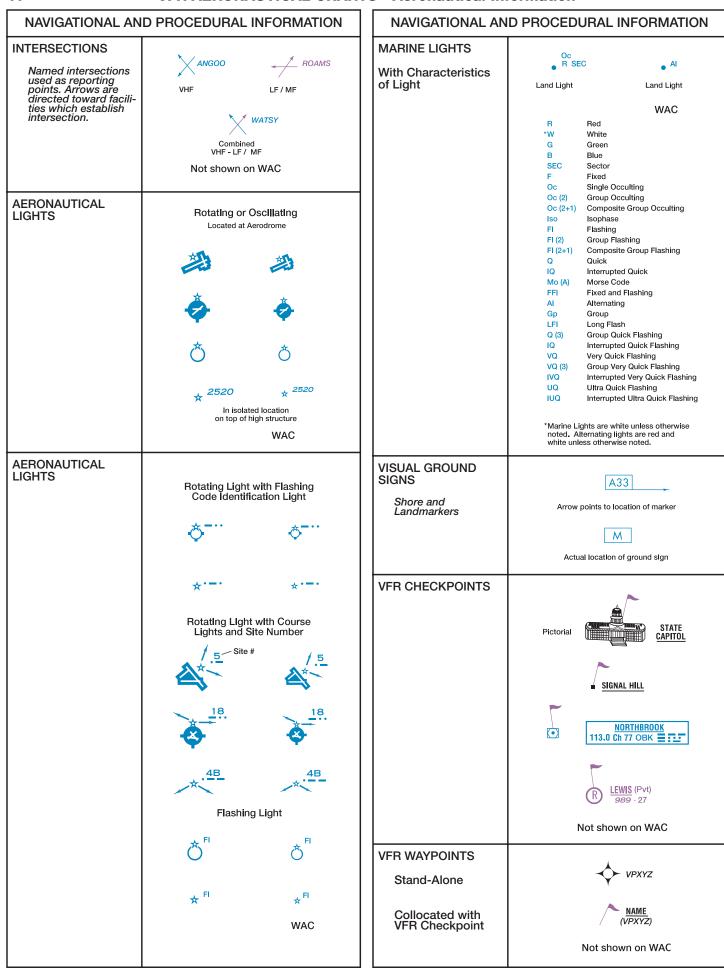
# 13 AIRSPACE INFORMATION **CLASS E AIRSPACE** The limits of Class E airspace shall be shown by narrow vignettes or by the [25] dashed magenta symbol. Individual units of designated airis of designated airspace are not nec-essarily shown; instead, the aggre-gate lateral and verti-cal limits shall be See NOTAMs/Directory for Class D/E (sfc) eff hrs space. defined by the follow-Airspace beginning at the surface (sfc) des-ignated around airshown. ports ... See NOTAMs/Directory for Class E (sfc) eff hrs See NOTAMs/Directory Airspace beginning at 700 feet AGL ... for 700' Class E eff hrs Airspace beginning at 1200 feet AGL or greater that abuts uncontrolled air-space (Class G) ... Differentiates floors 8000 AGL of airspace greater than 700 feet above the surface... When the ceiling is less than 18,000 feet MSL, the value, pre-fixed by the word "ceiling," shall be shown along the lim-its 11,500 MSL Not shown on WAC **OFFSHORE CONTROL AREAS** ATLANTIC LOW **CONTROL AREA** OF U.S. Class G Airspace 9500 MSL ATLANTIC LOW **CONTROL AREA** 8000 MSL **FLIGHT CONTROL AREA 1148L** and /or (CTA) ATLANTIC LOW **CONTROL AREA** WAC ATLANTIC LOW CONTROL AREA CONTROL AREA 1148L **OCEANIC** (OCA)

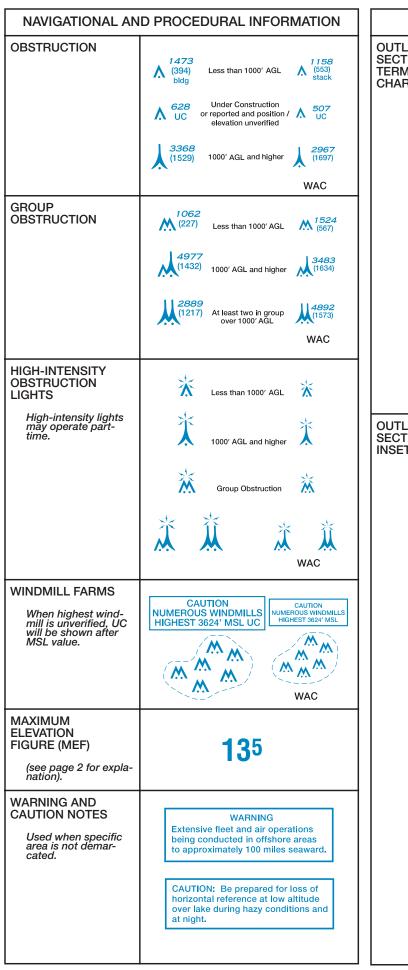
# AIRSPACE INFORMATION CANADIAN AIRSPACE TCA Class C/D Individual units of designated Canadian airspace are not necanspace are not nec-essarily shown; instead, the aggre-gate lateral and verti-cal limits shall be portrayed as closely as possible to the comparable U.S. air-TCA Class C/D WAC Outer limit only. Appropriate notes as required may be 125 - Ceiling of TCA Class C/D in hundreds of feet MSL 25 - Floor of TCA Class C/D in hundreds of feet MSL Class C or D Class D CZ Control Zone [30] ALTITUDE IN HUNDREDS OF FEET MSL Control Zone Class E CZ Not shown on WAC AIRSPACE CLASSIFICATION (SEE CANADA FLIGHT SUPPLEMENT) AND OPERATIONAL REQUIREMENTS (SEE DOD AREA PLANNING AP/1) MAY DIFFER BETWEEN CANADA AND UNITED STATES NOTE: REFER TO CURRENT CANADIAN CHARTS AND FLIGHT INFORMATION PUBLICATIONS FOR INFORMATION WITHIN CANADIAN AIRSPACE AIRSPACE OUTSIDE Other than Canada NOTE: REFER TO CURRENT DOD (NGA) FLIGHT INFORMATION PUBLICATIONS FOR INFORMATION OUTSIDE OF U.S. AIRSPACE Appropriate notes as required may be INFORMATION No FIR exists this side - No ticks **REGIONS (FIR)** MONCTON FIR CZQM WINNIPEG FIR CZWG **EDMONTON FIR CZEG CONTROL AREAS OAKLAND OCEANIC** CONTROL AREA











### **CHART LIMITS**

OUTLINE ON SECTIONAL OF TERMINAL AREA CHART



Pilots are encouraged to use the Los Angeles VFR
Terminal Area Chart for flights at or below 10,000'

Not shown on WAC

OUTLINE ON SECTIONAL OF INSET CHART



If inset chart is on a different chart:

INDIANAPOLIS INSET

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

If inset chart is on the same chart as outline:

See inset chart for additional detail

Not shown on WAC

	CULTURE		CULTURE
RAILROADS All gauges Single Track		RAILROAD SIDINGS AND SHORT SPURS	
Double Track	<del>-              </del> <del>           </del> WAC	ROADS  Dual-Lane Divided Highway Category 1	WAC
More Than Two Tracks	3 tracks	Primary Category 2	WAC
Electric	electric	Secondary Category 2	
RAILROADS IN JUXTAPOSITION		Category 2	
	***************************************	TRAILS Category 3	
RAILROAD- NONOPERATING, ABANDONED, DESTROYED	under construction	Provides symboliza- tion for dismantled railroad when com- bined with label "dis- mantled railroad."	
OR UNDER CONSTRUCTION	<del></del>	ROAD MARKERS  Interstate Route No.	<u> </u>
RAILROAD YARDS  Limiting Track To Scale	rallroad yard	U.S. Route No. Air Marked Identification Label	13
Location Only	rallroad yard	ROAD NAMES	LINCOLN HIGHWAY  LINCOLN HIGHWAY  WAC
RAILROAD STATIONS	station station	ROADS UNDER CONSTRUCTION	under construction

	CULTURE		CULTURE
BRIDGES AND VIADUCTS  Railroad  Road  OVERPASSES AND UNDERPASSES		FERRIES, FERRY SLIPS AND FORDS	ferry
CAUSEWAYS		PROMINENT FENCES	
TUNNELS-ROAD AND RAILROAD		BOUNDARIES  International	
POPULATED PLACES Large Cities Category 1		State or Province	
Cities and Large Towns Category 2		Convention or Mandate Line	RUSSIA  T T T T T T T T T T T T T T T T T T T
POPULATED PLACES  Towns and Villages Category 3	○ □ WAC	Date Line	INTERNATIONAL (Monday) DATE LINE (Sunday)

	CUITUDE		
	CULTURE		CULTURE
TIME ZONES	$HCT = \frac{PST}{TDT} = UTC$ $MST = \frac{MST}{TST} + 7$ $V = \frac{MST}{TST} + 1$ $V = \frac{MST}{TST$	SMALL LOCKS	
MINES OR QUARRIES Shaft Mines or Quarries	×	WEIRS AND JETTIES	jetties
POWER TRANSMISSION & TELECOMMUNICA- TION LINES	-å	SEAWALLS	seawall
PIPELINES	plpellne 	BREAKWATERS	breakwater
Underground	underground pipeline	PIERS, WHARFS, QUAYS, ETC.	piers
DAMS		MISCELLANEOUS CULTURAL FEATURES	■ stadlum ■ fort ■ cemetery
DAM CARRYING ROAD		OUTDOOR THEATER	후
PASSABLE LOCKS	locks	WELLS Other Than Water	oll O

	CULTURE		YDROGRAPHY
RACE TRACKS		SHORELINES	
HAGE TRACKS		Definite	or or
LOOKOUT TOWERS  Air marked identification	<b>⊙</b> 618 (Elevation Base of Tower)	Fluctuating	orza san
LANDMARK AREAS	dark area	Unsurveyed Indefinite	oter of
TANKS	water     oil	Man-made	orn of
COAST GUARD STATION	● gas	LAKES  Label as required  Perennial	numerous small lakes
	<b>↓</b> CG	When too numerous to show individual lakes, show represen- tative pattern and descriptive note.	756
AERIAL CABLEWAYS, CONVEYORS, ETC.	aerial cableway aerlal cableway	Non-Perennial (dry, intermittent, etc.) Illustration includes small perennial lake	
	WAC	RESERVOIRS	<b>\</b>
		Natural Shorelines	
		Man-made	roomair
Н	YDROGRAPHY	Shorelines	reservoir
OPEN WATER		Label when neces- sary for clarity	
	2 2 mg	Too small to show to scale	reservoir
INLAND WATER		Under Construc- tion	under construction

23 Н	YDROGRAPHY		YDROGRAPHY
STREAMS		WET SAND AREAS	
Perennial		Within and adjacent to desert areas	
Non-Perennial		AQUEDUCTS	<u>aqueduct</u>
Fanned Out  Alluvial fan	3-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7	Abandoned or Under Construction	abandoned aqueduct
Braided	V3322	Underground	underground aqueduct
Disappearing		Suspended or Elevated	
Seasonally Fluctuating with undefined limits		Tunnels	<del></del>
with maximum bank limits, prominent and constant		Kanats Underground aque- duct with air vents	underground aqueduct
Sand Deposits In and Along Riverbeds			

н	YDROGRAPHY		YDROGRAPHY
FLUMES, PENSTOCKS AND SIMILAR FEATURES	<u>flume</u>	To Scale	
Elevated	flume	Abandoned or Under Construction	<u>abandoned</u>
Underground	underground flume	Abandoned to Scale	abandoned
FALLS  Double-Line	falls	SMALL CANALS AND DRAINAGE / IRRIGATION DITCHES Perennial	
Single-Line	falls	Non-Perennial	
RAPIDS  Double-Line	rapids	Abandoned or Ancient	
Single-Line	rapids	Numerous  Representative pattern and/or descriptive note.	
CANALS	<u>ERIE</u>	Numerous	numerous canals and ditches

Н	YDROGRAPHY	H	/DROGRAPHY
SALT EVAPORATORS AND SALT PANS MAN EXPLOITED		LAND SUBJECT TO INUNDATION	
SWAMPS, MARSHES AND BOGS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SPRINGS, WELLS AND WATERHOLES	•
HUMMOCKS AND RIDGES		GLACIERS	
MANGROVE AND NIPA		GLACIAL MORAINES	
PEAT BOGS	peat bog	ICE CLIFFS	and a summer of the summer of
TUNDRA	tundra	SNOWFIELDS, ICE FIELDS AND ICE CAPS	9000
CRANBERRY BOGS	cranberry bog	ICE PEAKS	all and the
RICE PADDIES  Extensive areas indicated by label only.		FORESHORE FLATS  Tidal flats exposed at low tide.	

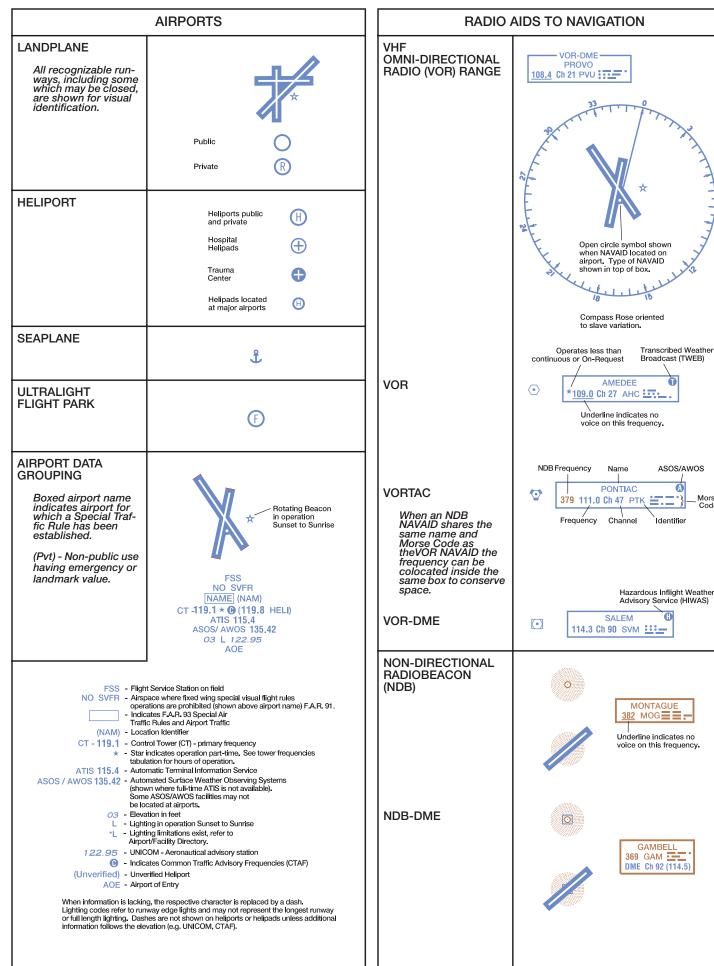
н	IYDROGRAPHY		RELIEF
ROCKS-ISOLATED	I	CONTOURS	
		CONTOURS	
Bare or Awash	*	Basic	
WRECKS		Basic	
Exposed	<u> </u>		
Exposed	AL.		
REEFS-ROCKY OR CORAL	w North		
	reactiful and should be an analysis of the control	Approximate	
MISCELLANEOUS UNDERWATER FEATURES NOT OTHERWISE SYMBOLIZED	shoals		
FIGURDONIDO AND	\	Intermediate	
FISH PONDS AND HATCHERIES	fish hatchery ■		WAC
		Auxiliary	
ICE		Adamary	WAC
Permanent Polar Ice	shelf ice	Depression  Illustration includes mound within depression	2000
	APAROXIMATE MINIMUM LIMITS POLAR ICE FOR SEPTEMBER	Values	5000
Pack Ice	pack Ice  APPROXIMATE MAXIMUM  LIMITS OF PACK ICE FOR MARCH		

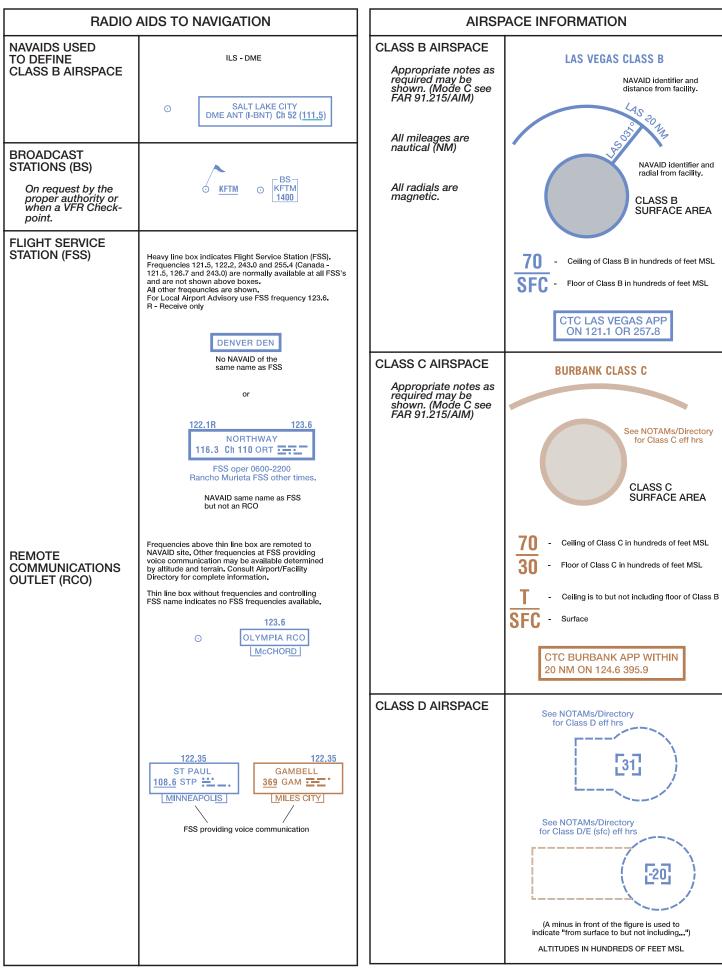
	RELIEF		RELIEF
ODOT EL EVATIONO	TELLE!	CANID OD ODAVIEL	I I I I I I I I I I I I I I I I I I I
Position Accurate	2216	SAND OR GRAVEL AREAS	
Position Accurate, Elevation Approximate		SAND RIDGES  To Scale	
Approximate location	2119	SAND DUNES  To Scale	
Highest in General Area	6973 (6973 WAC	SHADED RELIEF	
Highest on Chart	12770		THE PARTY OF THE P
MOUNTAIN PASS	) ( 12632	ROCK STRATA OUTCROP	rock strata
HACHURING		QUARRIES TO SCALE	quarry
UNSURVEYED AREAS Label appropriately as required	UNSURVEYED	STRIP MINES, MINE DUMPS AND TAILINGS To Scale	strip mine
UNCONTOURED AREAS Label appropriately as required	RELIEF DATA INCOMPLETE	CRATERS	crater o crater
DISTORTED SURFACE AREAS	lava	ESCARPMENTS, BLUFFS, CLIFFS, DEPRESSIONS, ETC.	A comment of the second of the
		LEVEES AND ESKERS	levee

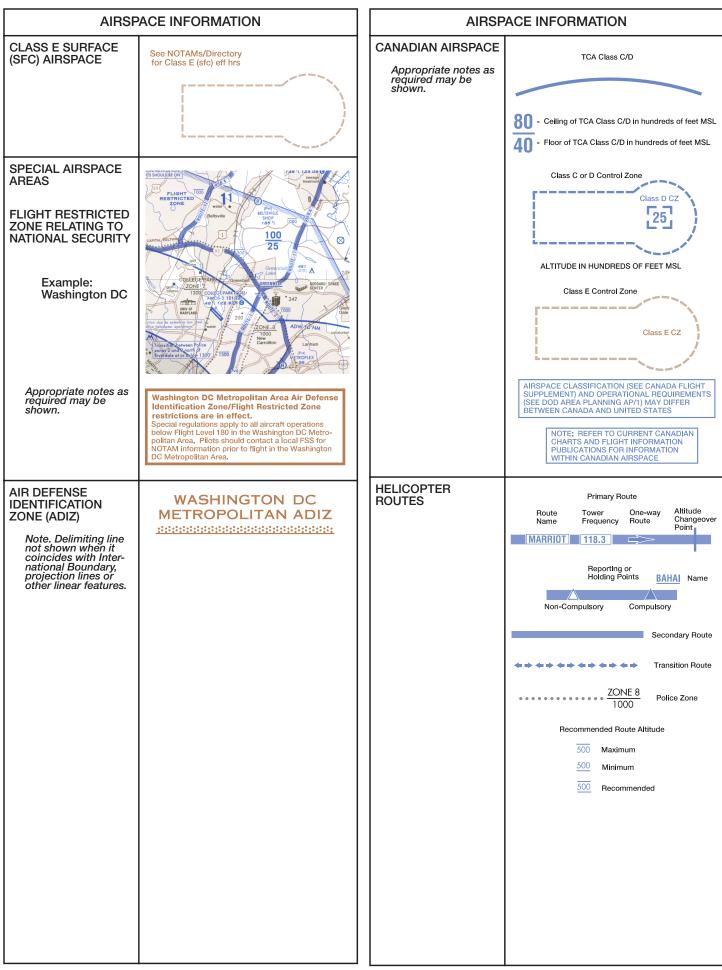
ASOS/AWOS

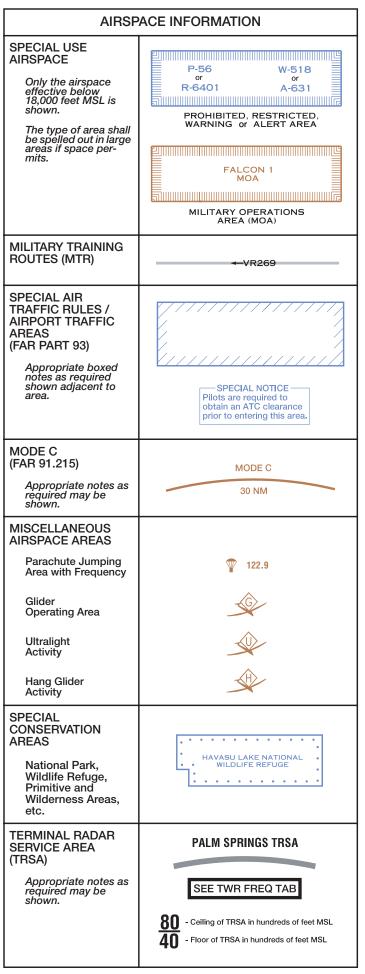
A

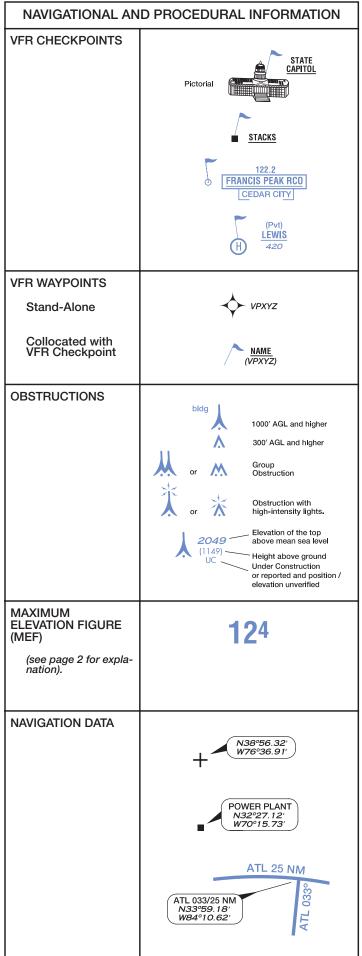
Morse Code





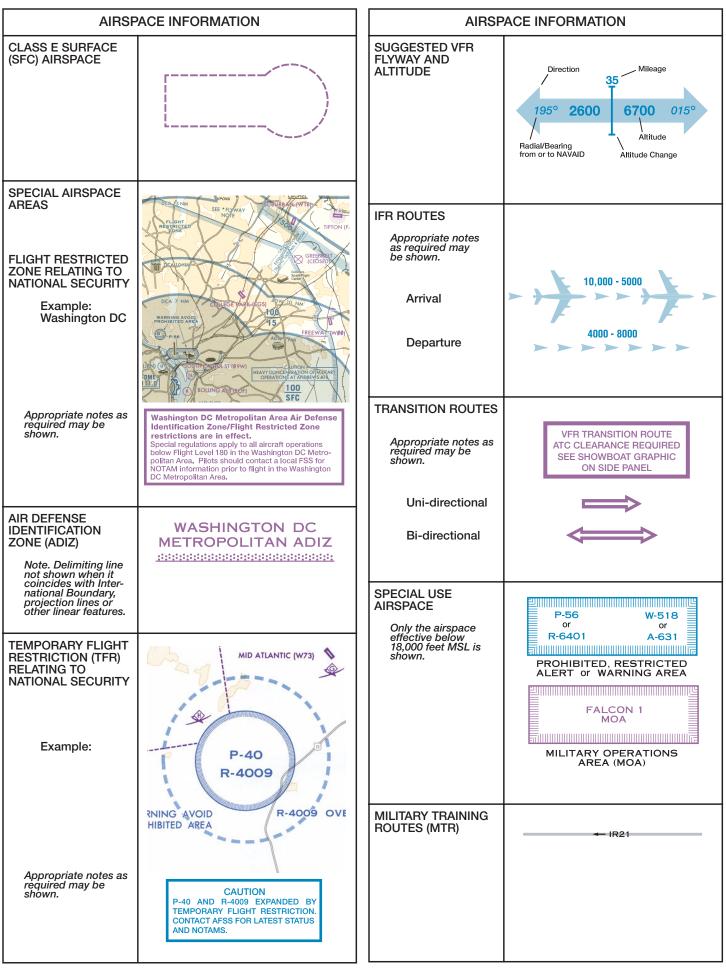


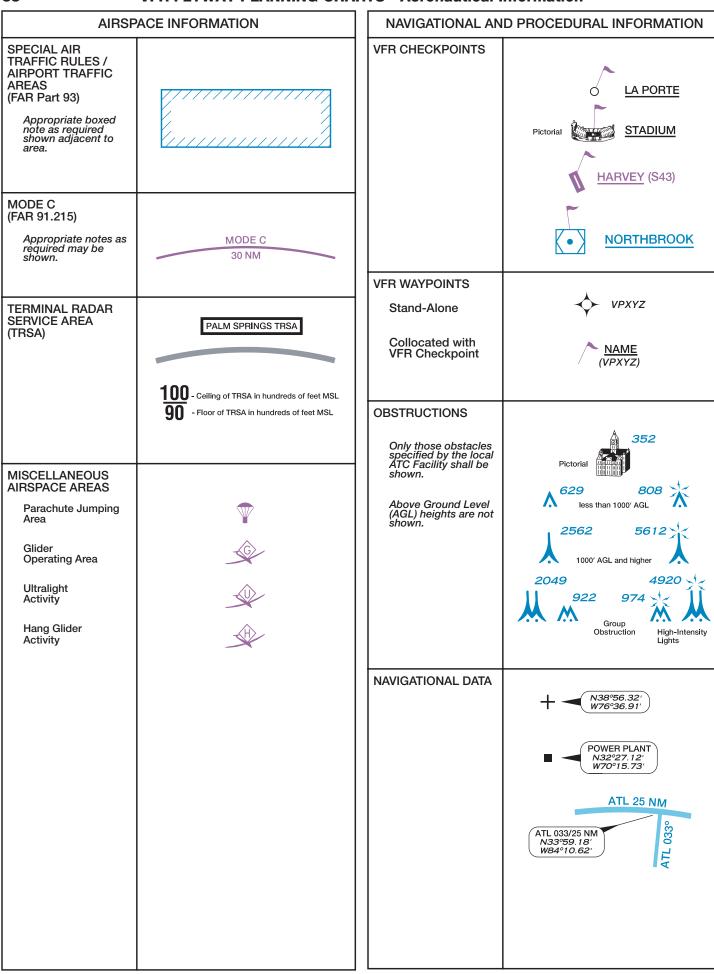




NAVIGATIONAL AND PROCEDURAL INFORMATION		CULTURE	
WARNING AND CAUTION NOTES	WARNING Extensive fleet and air operations being conducted in offshore areas to approximately 100 miles seaward.	POWER TRANSMISSION LINES	A
LOCAL MAGNETIC	CAUTION: Be prepared for loss of horizontal reference at low altitude over lake during hazy conditions and at night.	PROMINENT PICTORIALS	TEMPLE
NOTES			
Unreliability Notes	Magnetic disturbance of as much as 78° exists at ground level and 10° or more at 3000 feet above ground level in this vicinity.	LANDMARKS	■ Landmark Feature-stadium, factory, school, etc.
			Mines or Sace Track Quarries Race Track
	CULTURE		○ Outdoor Tank-water,
RAILROADS			Theater oil or gas
Single Track	<del></del>	Н	YDROGRAPHY
Double Track		SHORELINES	
ROADS Dual-Lane: Divided Highways Major Boulevards & Major Streets	HOLLYWOOD BOULEVARD		0 (22, 0 }
Major Streets  Primary	95 ————————————————————————————————————	MAJOR LAKES AND RIVERS	
BRIDGES	Railroad	RESERVOIRS	Dam
			RELIEF
POPULATED PLACES		SPOT ELEVATIONS	
Built-up Areas		Position Accurate	<b>.</b> 405
BOUNDARIES			
International			
State and Provincial			

#### **AIRPORTS** AIRSPACE INFORMATION **LANDPLANE CLASS B AIRSPACE** LAS VEGAS CLASS B Rotating Beacon in operation No distinction is Appropriate notes as NAVAID identifier and distance from facilty made between air-ports with services and those without required may be Sunset to Sunrise LAS 20 NA shown. **NO SVFR** and those without services. Runways may be exaggerated to clearly portray the pattern. Hard-surfaced runways which are closed but still exist are included in **RIVERSIDE (RAL)** (Mode C see FAR 91.215 /AIM) Paved Runways NAVAID identifier and All mileages are nautical (NM). exist are included in the charted pattern. radial from facility **AGUA DOLCE** (L7Ø) FAR 91 - Fixed wing special VFR opera-tions prohibited. All radials CLASS B are magnetic. SURFACE AREA Unpaved Runways (Pvt) (Pvt) - Non-public use (R)having emergency or landmark value. COMPTON - Ceiling of Class B in hundreds of feet MSL 1 - Floor of Class B in hundreds of feet MSL **RADIO AIDS TO NAVIGATION CLASS C AIRSPACE** EL TORO CLASS C VHF Appropriate notes as required may be **OMNI-DIRECTIONAL RADIO RANGE (VOR)** shown. Identifier Frequency (Mode C see FAR 91.215/AIM) **VOR** MAL 109.6 CLASS C SURFACE AREA **VORTAC** GCY 113.4 48 - Ceiling of Class C in hundreds of feet MSL - Floor of Class C in hundreds of feet MSL FHM 114.2 **VOR-DME** - Ceiling is to but not including floor of Class B Underline indicates no - Surface voice on this frequency NON-DIRECTIONAL **CLASS D AIRSPACE RADIOBEACON** WDP 396 (NDB) 40 Underline indicates no voice on this frequency Class E (sfc) NDB-DME LSJ 206 **NAVAIDS USED TO DEFINE CLASS B** (A minus in front of the figure is used to indicate "from surface to but not including...") **SALT LAKE CITY AIRSPACE** 0 **DME ANTENNA** ALTITUDE IN HUNDREDS OF FEET MSL (I-BNT) Ch 52 (111.5)





	CULTURE
RAILROADS	
Single and Multiple Tracks	<del></del>
ROADS	
Dual-Lane Divided Highway	HARBOR FREEWAY (110)
Primary	<del></del>
POPULATED PLACES	BREMERTON
Built-up Areas	
Towns	O LAWRENCEVILLE
BOUNDARIES	
International	
POWER TRANSMISSION LINES	—A———A—
PROMINENT PICTORIALS	TEMPLE
LANDMARKS	■ POWER PLANT
H	IYDROGRAPHY
SHORELINES	or or
MAJOR LAKES AND RIVERS	Bridge
RESERVOIRS	Dam

RELIEF			
Spot Elevations			
Position Accurate Mountain Peaks	6504		
Wouldin Feaks	6504		