

Annual Pilot Refresher

Judy Phelps ♦ Master CFI-Aerobatic, CFII



61.56 Flight Review

- A flight review consists of a minimum of one hour ground and one hour of flight training.
- Today's Class counts as the ground portion of your flight review.

FAA Pilot Proficiency Wings Program

- WWW.FAASafety.gov
- AC 61-91J WINGS
- WWW.AOPA.org – Air Safety Institute



One Hour Could Save Your Life!
FREE, Online Air Safety Courses

AOPA
AIR SAFETY FOUNDATION

▶ SEE COURSE LIST

Pilot Refresher Topics

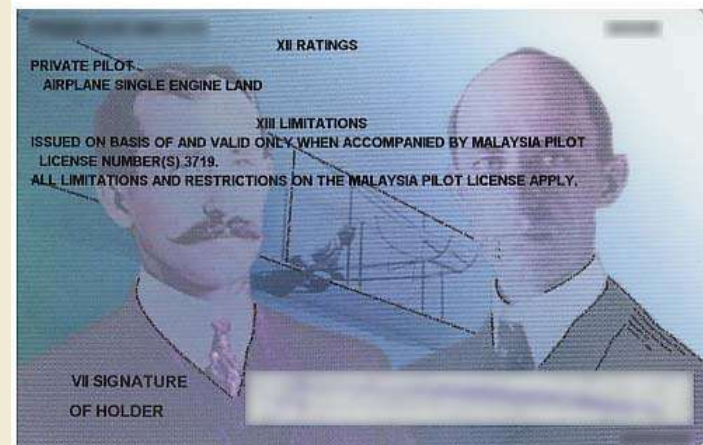
Be Sharp/Stay Sharp

- Regulations and General Operating rules
- Aeronautical Decision Making
- Airworthiness and Maintenance
- Flight Planning
- Aviation Weather
- Performance and Weight and Balance
- Airspace
- Charts



Required Documents for the Pilot 61.3

- Photo
- Current Medical
- Pilot Certificate



BasicMed

The BasicMed rule is now effective! Print off a [BasicMed Comprehensive Medical Examination Checklist \(CMEC\)](#) and get your physical exam with a state-licensed physician (every 4 years). Then complete an online medical course (every 2 years) and you're ready to fly!

Online Courses

- [AOPA Medical Self-Assessment Online Course](#)
- [Mayo Clinic BasicMed Online Training Course](#)

See BasicMed AC68-1A for more information

Flying under BasicMed

- Comply with the general BasicMed requirements (possess a U.S. driver's license, have held a medical after July 14, 2006).
- Get a physical exam with a state-licensed physician, using the Comprehensive Medical Examination Checklist.
- Complete a BasicMed medical education course.
- Go fly!

Operating Requirements

- Carries not more than five passengers.
- Operates under VFR or IFR, within the United States, at less than 18,000 feet MSL, not exceeding 250 knots.
- Flight not operated for compensation or hire.

61.51 Pilot Logbooks

Must document and record training and aeronautical experience for a certificate, rating or flight review.

Also the requirements for meeting the recent flight experience.

Recent Flight Experience Requirements 61.57

- 3 Take offs and landings within the preceding 90 days.
- If in a tailwheel they must be to a full stop.
- Night 3 take offs and landings to a full stop within the preceding 90 days.
- Flight Review.

91.3 Responsibility

- The pilot in command of an aircraft is directly responsible for, and is the final authority to, the operation of that aircraft.

Past 20 years 85% of accidents are from pilot error!



Acronym

Decision Making

- **P**ilot in command
- **A**ircraft
- en**V**ironment
- **E**xternal pressures



Controlled Flight Into Terrain

or better
known as
CFIT



91.111 Collision Avoidance

8-1-8 AIM Recognize high hazards

- Airspace
- Cockpit management
- Windshield conditions
- Visibility conditions



Watch for Areas of High Activity

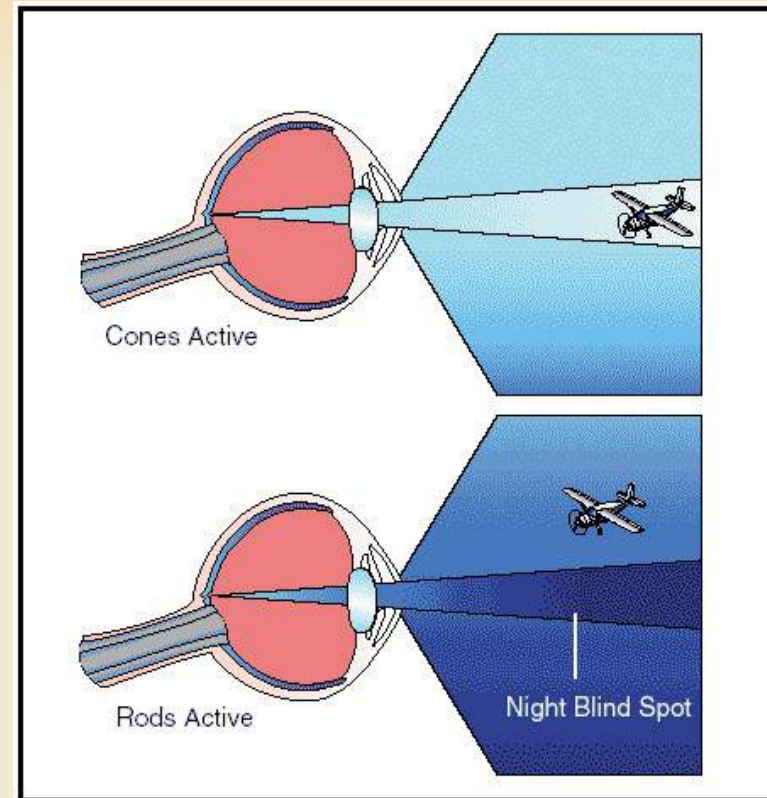
- **VORs**
- **Santa Paula Aerobatic Area 122.775**
- **Simi Valley Practice Area**
- **Newhall pass**
- **Saticoy Bridge**



91.111 Collision Avoidance

8-1-6 AIM Vision in Flight

- Your eyes should be outside most of the time
- ATC Support - use it but still with caution



91.113 Right of Way Rules

- In distress
- Least maneuverable
- Converging
- Overtaking
- Head-on
- Landing



91.119 Minimum Safe Altitudes





- 1,000' - over congested area above the highest obstacle within a horizontal radius of 2,000'
- 500' - other than congested except over open water or sparsely populated areas. In this case it's 500' to any person, vessel, vehicle or structure

91.121 Altimeter Settings

- Current setting within 100nm
- Airport Elevation
- Above 18,000 29.92



91.125 Light Signals

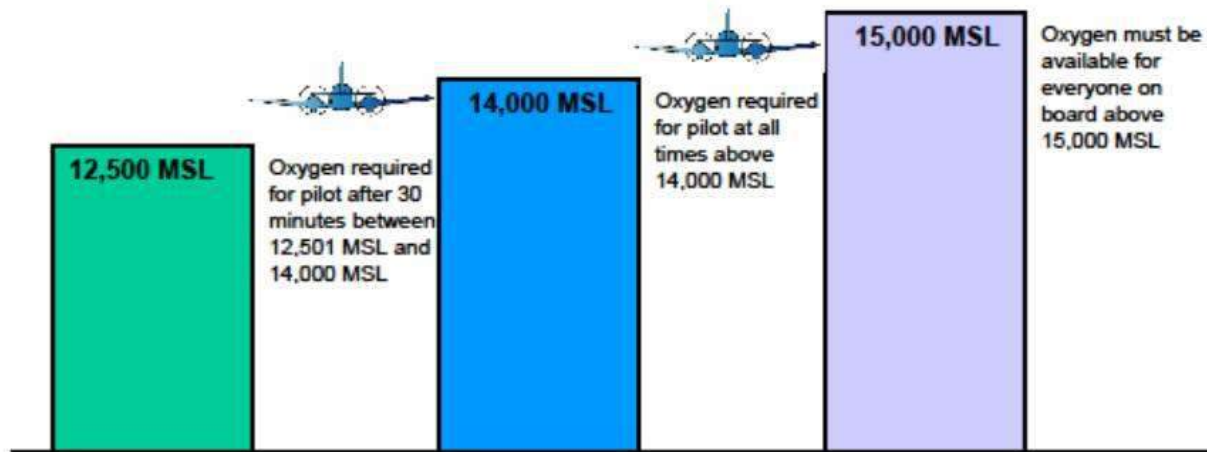
LIGHT GUN SIGNALS			
COLOR AND TYPE OF SIGNAL	MOVEMENT OF VEHICLES, EQUIPMENT AND PERSONNEL	AIRCRAFT ON THE GROUND	AIRCRAFT IN FLIGHT
STEADY GREEN 	Cleared to cross, proceed or go	Cleared for takeoff	Cleared to land
FLASHING GREEN 	Not applicable	Cleared for taxi	Return for landing (to be followed by steady green at the proper time)
STEADY RED 	STOP	STOP	Give way to other aircraft and continue circling
FLASHING RED 	Clear the taxiway/runway	Taxi clear of the runway in use	Airport unsafe, do not land
FLASHING WHITE 	Return to starting point on airport	Return to starting point on airport	Not applicable
ALTERNATING RED AND GREEN 	Exercise Extreme Caution!!!!	Exercise Extreme Caution!!!!	Exercise Extreme Caution!!!!

91.123 Compliance with ATC Instructions

- Except in an Emergency you must comply
- If you have to deviate notify ATC
- If requested submit a report within 48 hrs

91.211 Supplemental Oxygen

Oxygen Requirements



Reference: 14 CFR 91.211

Acronym

Decision Making

Illness

Medication

Stress

Alcohol

Fatigue

Emotion



Acronym

Decision Making

Detect – that change has occurred

Estimate – need to correct or react

Choose – a course of action

Identify – solution

Do – the necessary action

Evaluate – the effect of the action

Aeromedical Factor

Scuba Diving

AIM 8-1-2

Up to 8,000'

12 hrs – no controlled ascent

24 hrs – controlled ascent

Above 8,000' – 24 hrs



Acronym

Certificates & Documents

Airworthiness Certificate

Registration – Expires every 3 years

Radio License (if international)

Operation Limitations (AFM or POH)

Weight and Balance

Don't forget the Equipment List

Acronym

Inspections

Annual

VOR 30 days if IFR

I 100 hour if for hire

Altimeter – 24 calendar months

Transponder – 24 calendar months

ELT 12 Calendar months

Don't forget those AD's

Acronym

91.205 Instruments and Equipment Required
for DAY

Tachometer

Oil pressure

Manifold pressure

Altimeter

Temperature gauge for liquid cooled

Oil temperature

Day continued

Fuel gauge

Flotation gear

Landing gear position indicator

Airspeed

Anti collision lights (after 03/31/96)

Magnetic direction indicator (compass)

Emergency locator transmitter (ELT)

Seat belts

Acronym

91.205 Instruments and Equipment Required for Night

Fuses

Landing light (if for hire)

Anti collision light

Position lights

Source of electrical energy

Inoperative instrument or equipment

What do you do?

Per 91.213

Safe – is it?

Type certificate or equipment list

AD required

Regulation Required 91.205 – day/night

MEL – part 121, 125 & 135

Equipment- Deactivate and Placard “inoperative”

Logbook entry if mx required

91.103 Preflight Action

The Pilot in command shall become familiar with all available information concerning the flight

- Weather reports
- Forecasts
- Fuel requirements
- Alternatives available
- Runway lengths
- Take off and landing distance



Types of Briefings



Standard

- Adverse conditions
- VFR flight not recommended
- Synopsis
- Current conditions
- En route forecast
- Destination forecast
- Wind and temperatures aloft
- Notice(s) to Airmen
- ATC delays
- Other

Types of Briefings

Outlook

- Departure is 6 or more hours away

Abbreviated

- Shortened version of Standard



Technology has changed



So what do I use?

- 1800wxbrief.com
- Foreflight on my iPad
- Aviationweather.gov
- The Phone



NAVIGATION LOG

CHECKPOINTS	CH	TAS	ALT	VOR		WIND		TC	TH	MH	CH	DIST	GS	TIME OFF		FUEL	
				Freq	Bearing	Direction	Velocity	WCA -L +R	Variation - E+W	Deviation +/-		139	Est	ETE	Used		
				Ident	To/From		Temp °C					Leg				Act	ATE
Departing Airport: CMA																	
Lake Casitas	284	80	Climb 65	114.9	284	110	13	297	297	284	284	17	91	11	1.4		
					TO		11	0	-13	0							
RZS	284	105	65	114.9	284	110	13	297	297	284	284	23	115	12	1.6		
					TO		11	0	-13	0							
IZA	293	105	65	114.9	290	110	13	305	306	293	293	16	115	8	1		
					FROM		11	+1	-13	0							
SMX	292	105	65			110	13	305	306	292	292	26	115	14	1.9		
							11	+1	-14	0							
SBP	342	105	65	114.3	335	110	13	350	355	341	342	22	110	12	1.6		
					TO		11	+5	-14	+1							
Atascadero	342	105	45	114.3	335	110	13	350	355	341	342	13	110	7	.5		
					TO		11	+5	-14	+1							
PRB	342	105		114.3	335	110	13	350	355	341	342	12	110	7	.5		
					TO		11	+5	-14	+1							
Destination Airport: PRB	Elevation: 836 Pattern Alt: 1836			ATIS		TOTALS Distance/Time/Fuel						129		71	8.5		
				Wind Altimeter Runway		NOTES: Left traffic all runways						Departure: COMMUNICATIONS Arrival					
												ATIS	126.025	ATIS	120.125		
												CLRNC	-	CNTR	-		
												GRND	121.8	APRCH	128.7		
												TWR	128.2	TWR	-		
												DPRT	124.7	GRND	-		
												CNTR	-		-		
												FSS	122.3	FSS	122.4		
												CTAF	-	CTAF	123.0		

Location		WX BRIEFING & PRE-FLIGHT PLANNING				TAKE-OFF & LANDING COMPUTATIONS							
CMA		Wind 070 @ 13 Vis 10 Sky dr Temp/Dew 23/-07 Alt 30.10				Airport		CMA		PRB			
PRB		Wind 070 @ 13 Vis 10 Sky dr Temp/Dew 23/-04 Alt 30.15				Airport Elevation		77 MSL		836 MSL		MSL	
SMX		Wind 320 @ 09 Vis 10 Sky dr Temp/Dew 23/-02 Alt 30.13				Pattern Altitude		877 MSL 800 AGL		1836 MSL 1000 AGL		MSL AGL	
Location		Winds & Temps Aloft				Runway Length		6013 FT		6009 FT		FT	
		Alt: 3000	Alt: 6000	Alt:	Alt:	Temperature		27 °C		23 °C		°C	
SBA		120@6	110@13			Pressure Altitude		-103 MSL		606 MSL		MSL	
						Density Altitude		900' MSL		1200' MSL		MSL	
						Wind		070° @ 13 KTS		070° @ 13 KTS		" @ KTS	
Location		Airmets/Sigmets/NOTAMS/TFRs				Aircraft Gross Wt.		2300 LBS		22250 LBS		LBS	
SZP		Runway Closed				Required Rnwy Lngth		1590 FT		1300 FT		FT	
		No TFRs				Rate of Climb		600 FPM		NA FPM		FPM	
		No Airmets/Sigmets				Refer to Pilot's Operating Handbook [POH] for take-off & landing data.							
Weight & Balance						FLIGHT PLAN							
Weight x Arm = Moment													
Empty A/C	1456.5	-			56,972	1. Type [x] VFR [] IFR [] DVFR	2. Aircraft Identification 80914	3. Aircraft Type/ Equip 172/U	4. True Airspeed 105 KTS	5. Departure Point CMA	6. Departure Time [UTC] Proposed Actual 1700		7. Cruising Altitude 65
Front Pass	360	37			13,320	8. Route of Flight							
Rear Pass	180	72			12,960	RZS SMX							
Fuel	240	47.8			11,472	9. Destination [Name of airport and city]							
Baggage	0	-			-	PRB		10. Estimated Time Enroute Hrs Mins 1 15		11. Remarks			
Total Gross	2236.5	Total Moment			94,724	12. Fuel On Board Hrs Mins 4 30		13. Alternate Airport(s)		14. Pilot's Name, Address, Telephone No. and Aircraft Home Base VC 99s		15. No. on Board 3	
CG = Total Mom/Total Wt		42.35											
Climb Data from POH			Fuel Requirements										
From Alt	77'	Total Useable			40	16. Color of Aircraft		17. Destination Contact / Telephone Number (Optional)					
To Alt	6500'	Start, Taxi, Run-up			1.1	White/Red/Blue		99s Headquarters					
NM to Climb	15	Climb			2.3	CLOSE VFR FLIGHT PLAN WITH _____ FSS [1-800-WX-BRIEF] [1-800-992-7433]							
Min to Climb	12	Cruise			7.2	Special Equipment Suffix							
Gals to Climb	2.3	Reserve - 30 min			4	/A - DME, Transponder with Mode C /D - DME, no Transponder /U - Transponder with Mode C /B - DME, Transponder no Mode C /R - RNAV, Transponder with Mode C /W - RNAV, no Transponder /C - RNAV, Transponder no Mode C /T - Transponder with no Mode C /X - No Transponder /G - Global Positioning System [GPS], Global Nav. Sat. System [GNSS] with oceanic, terminal, and GPS approach capability							
		Total Fuel Required			14.6								

ForeFlight Nav. Log

KSZP — KPRB (February 02, 2019) in N66168 (C172)

Created Feb 02 2019 2339Z

Basic Performance Profile

ETE	Distance	Avg Wind	ETD	ETA	Flight Fuel	Taxi Fuel
1h18m	127nm	4kt head (225°/028)	0350 PM PST / 2350Z	0508 PM PST / 0108Z	12 g	0 g

Route

RZS KIZA KSMX KSBP

Waypoint	Airway	HDG	CRS	ALT	WIND			ISF	SPD KT	TAS	GS	DIST NM		TIME		ETE	ACT
					DIR	SPD	ISA					LEG	REM	LEG	REM		
KSZP		-	-	248	-	-	-2	0	0	-	127	-	1:18	-			
-TOC-	DCT	268	274	6000	H14	246/019	-2	80	66	13	114	0:12	1:06	0:12			
RZS SAN MARCUS (SANTA BARBARA 114.9)	DCT	268	274	6000	H20	245/025	-2	105	85	24	90	0:16	0:50	0:28			
KIZA SANTA YNEZ	DCT	263	279	6000	H15	222/031	-4	105	90	16	74	0:11	0:39	0:39			
KSMX SANTA MARIA PUB/CAPT HANCOCK	DCT	284	301	6000	H4	222/031	-4	105	101	26	48	0:16	0:23	0:55			
KSBP SAN LUIS CO REGL	DCT	308	323	6000	T9	222/032	-4	105	114	22	26	0:11	0:12	1:06			
-TOD-	DCT	338	349	6000	T19	221/026	-3	105	124	4	22	0:02	0:10	1:08			
KPRB	DCT	338	349	839	T23	225/029	-3	105	128	22	-	0:10	-	1:18			

Winds Aloft	2000 ft (ISA: 11°C)		4000 ft (ISA: 7°C)		6000 ft (ISA: 3°C)		8000 ft (ISA: -1°C)		10000 ft (ISA: -5°C)	
	(COMP) WIND	ISA	(COMP) WIND	ISA	(COMP) WIND	ISA	(COMP) WIND	ISA	(COMP) WIND	ISA
-TOC-	(H15) 246/018	-5	(H15) 246/018	-1	(H20) 245/025	-2	(H25) 227/037	-4	(H25) 227/037	0
RZS	(H7) 219/015	-5	(H7) 219/015	-1	(H17) 222/031	-4	(H21) 225/035	-6	(H21) 225/035	-2
KIZA	(H5) 218/015	-5	(H5) 218/015	-1	(H15) 222/031	-4	(H19) 224/035	-6	(H19) 224/035	-2
KSMX	(T0) 218/015	-5	(T0) 218/015	-1	(H4) 222/032	-4	(H7) 224/036	-6	(H7) 224/036	-2
KSBP	(T8) 222/029	-5	(T8) 222/029	-1	(T7) 225/029	-3	(T6) 227/030	-5	(T6) 227/030	-1
-TOD-	(T20) 222/029	-5	(T20) 222/029	-1	(T19) 225/029	-3	(T19) 227/030	-5	(T19) 227/030	-1
	1h13m (-0:05), 11 g Avg wind comp: H1		1h15m (-0:03), 11 g Avg wind comp: H2		1h18m (0:00), 12 g Avg wind comp: H4		1h20m (+0:02), 12 g Avg wind comp: H6		1h22m (+0:04), 13 g Avg wind comp: H6	

Airport	WX	TWR/CTAF	CLR	GND	ELEV	LONGEST RWY
KSZP	N/A	122.9	N/A	N/A	248	04 / 22
KPRB	120.125	123.0	N/A	N/A	839	01 / 19

Summary & Times

Tail	N66168 (C172)
Profile	Basic Performance Profile
Distance	127nm
ETD	0350 PM PST / 2350Z

Notes

Out: In: Block time:
Off: On: Flight time:

1800wxbrief.com nav. log

Kneeboard PDF



Aircraft:	N739MB	Total Distance:	127 nm
Est Date/Time:	02/03/2019 0200 UTC	Total Time Enroute:	01:29
Actual Date/Time:		Total Fuel Consumption:	10.4 Gallons
Departure:	KSZP	*First leg includes startup/taxi fuel	
Destination:	KPRB		
Route:	RZS KIZA KSMX KSBP		
Proposed Altitude:	6500 ft		

Weather:	Ground:
ATIS:	Tower:
Clearance Delivery:	Departure:
CTAF:	Clearance:

Fix Name Lat/Long	Morse Id Freq	Wind (Deg/kt) Temp (Celsius)	MH MC	Altitude (ft) Route	Leg (nm) Remaining (nm)	Est GS (kt)	Leg Tot	Leg Fuel (gal) Total (gal)	Notes
KSZP 34°20.8' / -119°03.7'		240/020 007	265	200	36	69	00 : 32	1.1 + 3.3	
RZS - San Marcus 34°30.6' / -119°46.3'	..- .-.-. .-. 114.9	240/029 -004	274	Direct	90	79	00 : 32	4.4	
KIZA 34°36.4' / -120°04.5'		242/033 -004	269	6500	16	84	00 : 12	1.3	
KSMX 34°54.0' / -120°27.5'		241/036 -004	279	Direct	74	96	00 : 44	5.7	
KSBP 35°14.2' / -120°38.6'		241/036 -004	285	6500	26	118	01 : 02	1.9	
KPRB 35°40.4' / -120°37.6'		214/028 010	301	Direct	48		00 : 14	7.6	
			304	6500	22		01 : 16	1.4	
			323	Direct	26		00 : 13	9.0	
			334	6500	26		01 : 29	1.4	
			349	Direct	0			10.4	

Approach:	Tower:
Weather:	Ground:
ATIS:	FBO/Other:
CTAF:	

NOTES:

Kneeboard pdf

NavLog for N739MB

www.1800wxbrief.com

ATIS/AWOS/ASOS:		Cleared to:						
UNICOM:		Depart:						
Clearance Del:								
Ground:								
Tower:		Altitude:						
Departure:		Dep Frq/Squawk: /						
KSZP RZS KIZA KSMX KSBP KPRB								
ATD	ETE	ETA	Total Distance	Fuel Required		Fuel Available		
	01:29		127 nm	10.4 gal				
Fix	Morse Code	Wind	MH	Leg	ETE	Alt (ft)	Leg Fuel	
	Freq	Temp	MC	Rem	ATE	GS (kt)	Total	
				(nm)			(gal)	
KSZP		240/020						
34°20.8' / -119°03.7'		007	265	36	00:32	200	1.1+3.3	
			274	90		69	4.4	
RZS - San Marcus	... --- ...	240/029						
34°30.6' / -119°46.3'	114.9	-004	269	16	00:12	6500	1.3	
			279	74		79	5.7	
KIZA		242/033						
34°36.4' / -120°04.5'		-004	285	26	00:18	6500	1.9	
			301	48		84	7.6	
KSMX		241/036						
34°54.0' / -120°27.5'		-004	304	22	00:14	6500	1.4	
			323	26		96	9.0	
KSBP		241/036						
35°14.2' / -120°38.6'		-004	334	26	00:13	6500	1.4	
			349	0		118	10.4	
KPRB		214/028						
35°40.4' / -120°37.6'		010	Dep					
ATIS/AWOS/ASOS:								
Approach:		Dest						
UNICOM:								
Tower:								
Ground:								

Notes

Welcome JUDY PHELPS

Sat Feb 02 16:23:31 PST | 0:23:31 Z

Draft

Domestic | ICAO

Recent Flight Plans Favorite Flight Plans Save as Favorite

Notice: Per FAA Guidance, IFR flights exiting US airspace must be filed as ICAO flight plans.

Flight Rule VFR	Aircraft ID N739MB	Aircraft Type C172	Aircraft Equipment G	No. of Aircraft 1	Heavy <input type="checkbox"/>	Airspeed 0100	Altitude (100s ft) <input type="text"/>	Optimize	
Departure KSZP	Airport Info Area Brief	Departure Date & Time 02/02/2019 1800 PST	Evaluate	Route of Flight (Blank for direct) RZS KIZA KSMX KSBP					Map Plan
Destination KPRB	Airport Info Area Brief	Time Enroute 0130	Fuel on Board 0430	Remarks (Optional)				No. on Board 2	
Alternate 1 (Optional)	Airport Info Area Brief	Alternate 2 (Optional)	Airport Info Area Brief	Pilot Contact Information PHELPS, JUDY, (805)750-6193 KSZP, (805)525-2138					
Aircraft Color WHITE/MARRON	Route Briefing Settings Briefing Corridor 50 nm Winds Aloft Corridor 200 nm High Altitude Briefing <input type="checkbox"/>			Opt. Standard Brief Products <input checked="" type="checkbox"/> Flow Control Messages <input checked="" type="checkbox"/> NHC Bulletins <input checked="" type="checkbox"/> Non-Location FDC NOTAMs <input checked="" type="checkbox"/> State Department NOTAMs <input checked="" type="checkbox"/> Military NOTAMs					

Standard Brief Outlook Brief Abbreviated Brief Scheduled Email Brief File NavLog Return Flight Plan Clear

Welcome JUDY PHELPS

Sat Feb 02 16:40:38 PST | 0:40:38 Z

Proposed

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Recent Flight Plans Favorite Flight Plans Save as Favorite

Notice: Per FAA Guidance, IFR flights exiting US airspace must be filed as ICAO flight plans.

Flight Rule VFR	Aircraft ID N739MB	Aircraft Type C172	Aircraft Equipment C	No. of Aircraft 1	Heavy <input type="checkbox"/>	Airspeed 0100	Altitude (100s ft) 65	Optimize	
Departure KSZP	Airport Info Area Brief	Departure Date & Time 02/02/201	Evaluate	Route of Flight (Blank for direct)				Map Plan	
Destination KPRB	Airport Info Area Brief	Time Enr 0130	<div style="border: 1px solid gray; padding: 5px;"> <p>Results</p> <p>Flight plan successfully filed.</p> <p>EasyActivate™ and EasyClose™ registered for: Email: judy@cpaviation.com</p> <p>OK</p> </div>				No. on Board 2		
Alternate 1 (Optional)	Airport Info Area Brief	Alternate					Information		
Aircraft Color WHITE/MARRON	Route Briefing Settings Briefing Corridor 50 nm Winds Aloft Corridor 200 nm High Altitude Briefing <input type="checkbox"/>		Opt. Standard Brief Products <input checked="" type="checkbox"/> Flow Control Messages <input checked="" type="checkbox"/> NHC Bulletins <input checked="" type="checkbox"/> Non-Location FDC NOTAMS <input checked="" type="checkbox"/> State Department NOTAMS <input checked="" type="checkbox"/> Military NOTAMS						
Standard Brief	Outlook Brief	Abbreviated Brief	Scheduled Email Brief	Amend	Cancel	Activate	NavLog	Return Flight Plan	Clear

What to Look For



AIRMETs - *think "Moderate"*

- (T) Turbulence, surface wind 30kts or greater
- (Z) Icing
- (S) Mountain obscuration

SIGMETs - *think "Severe"*

- Turbulence
- Icing
- Dust storms
- Volcanic ash
- Tornadoes
- Lines of thunderstorms
- Embedded thunderstorms
- Hail greater than $\frac{3}{4}$ inch

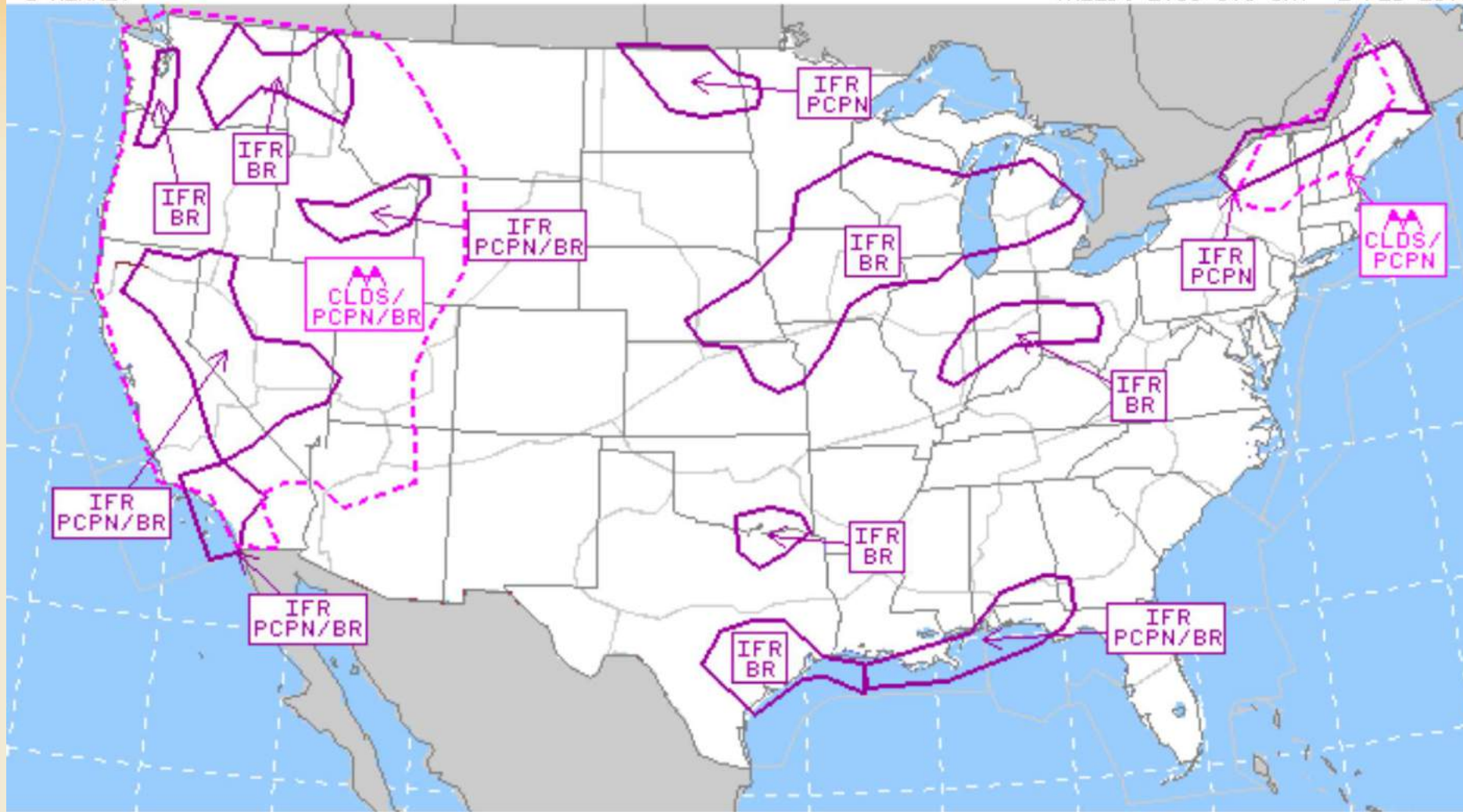
CONVECTIVE SIGMETs

- Severe thunderstorms
- Surface winds greater than 50kts

Airmet Sierra

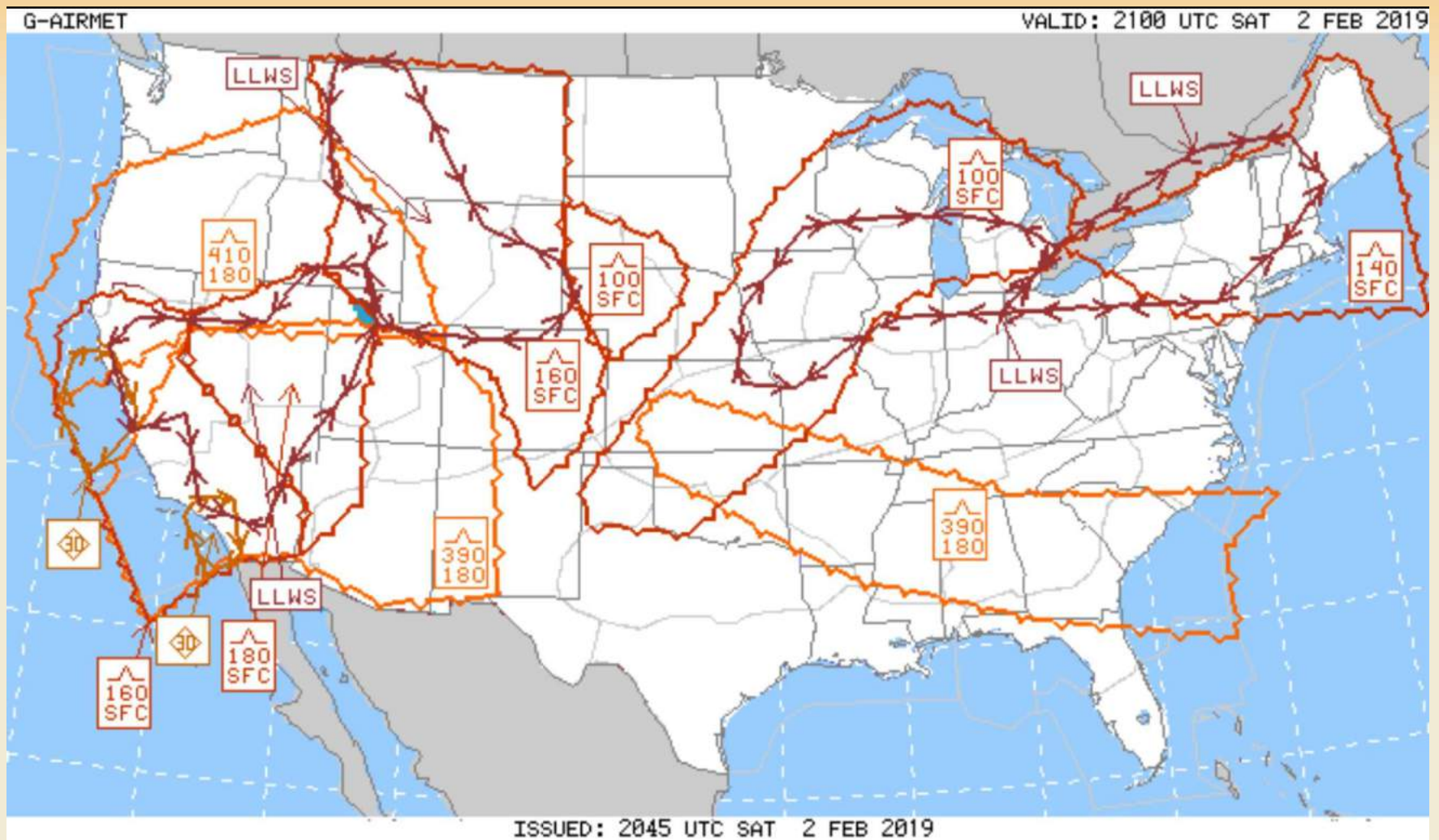
G-AIRMET

VALID: 2100 UTC SAT 2 FEB 2019

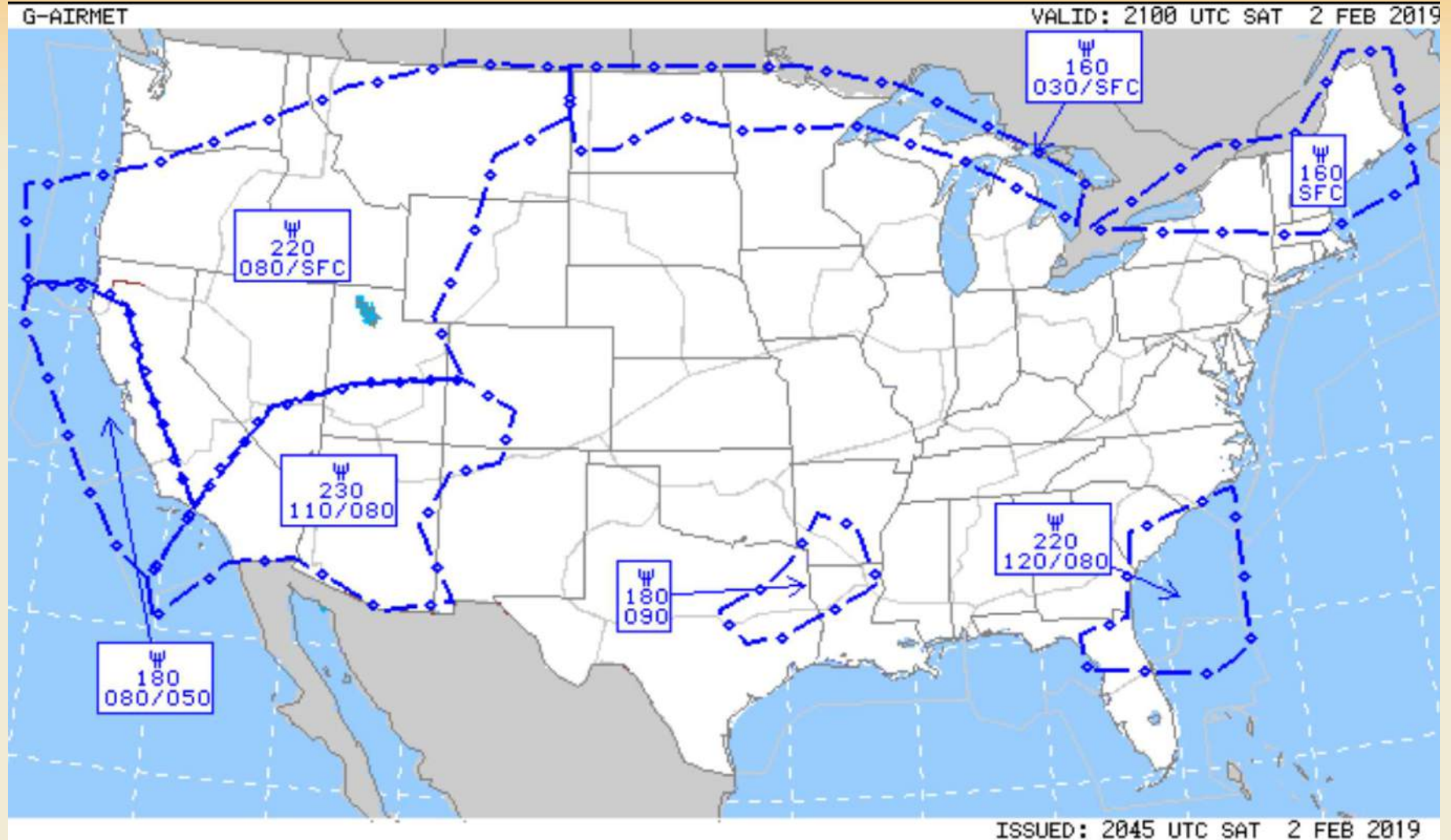


ISSUED: 2045 UTC SAT 2 FEB 2019

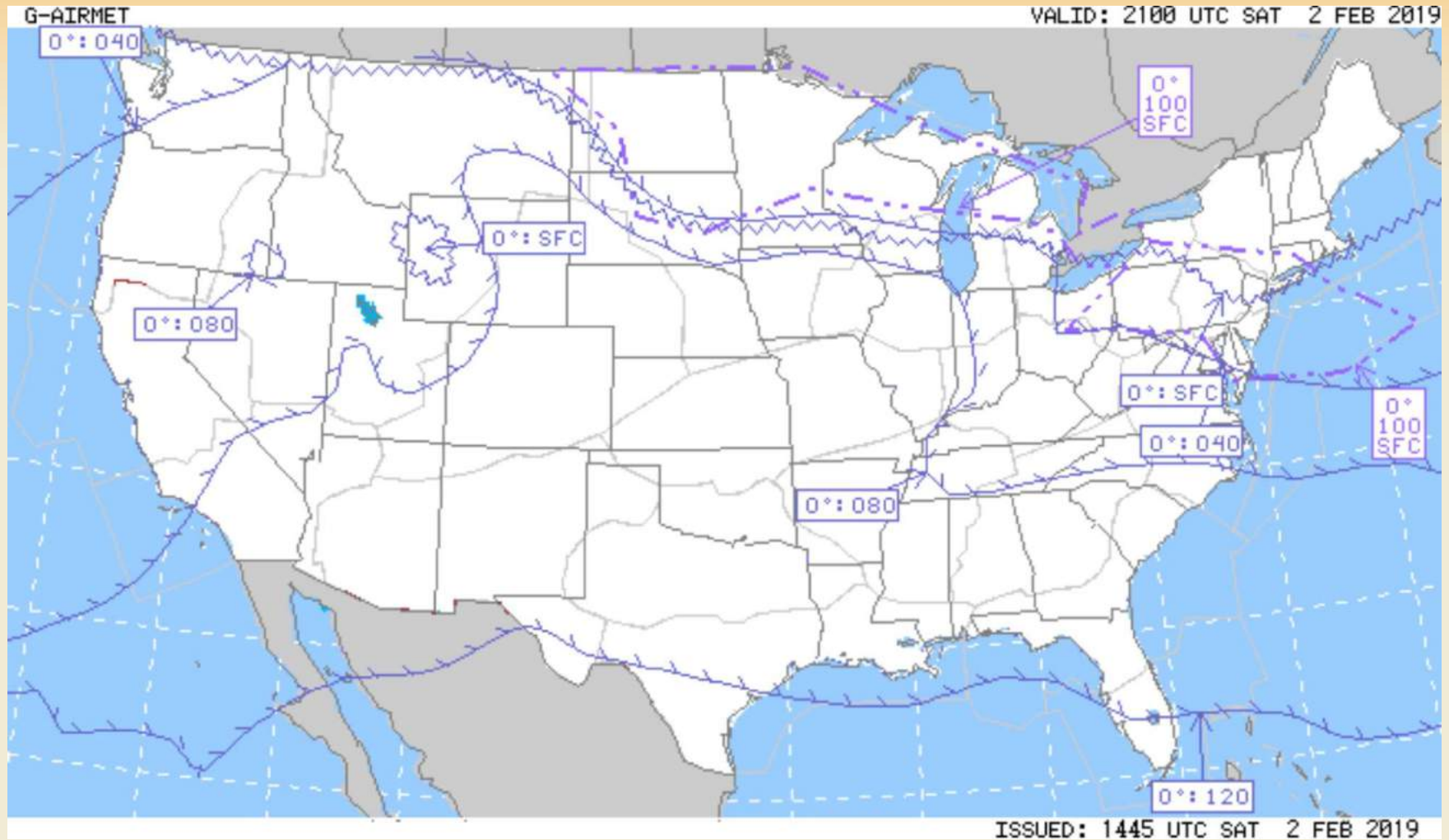
Airmet Tango



Airmet Zulu



Freezing Level



Convective Sigmet

Convective SIGMETs (red) and outlooks (orange)

chart created at 2320 UTC Sat 02 Feb 2019



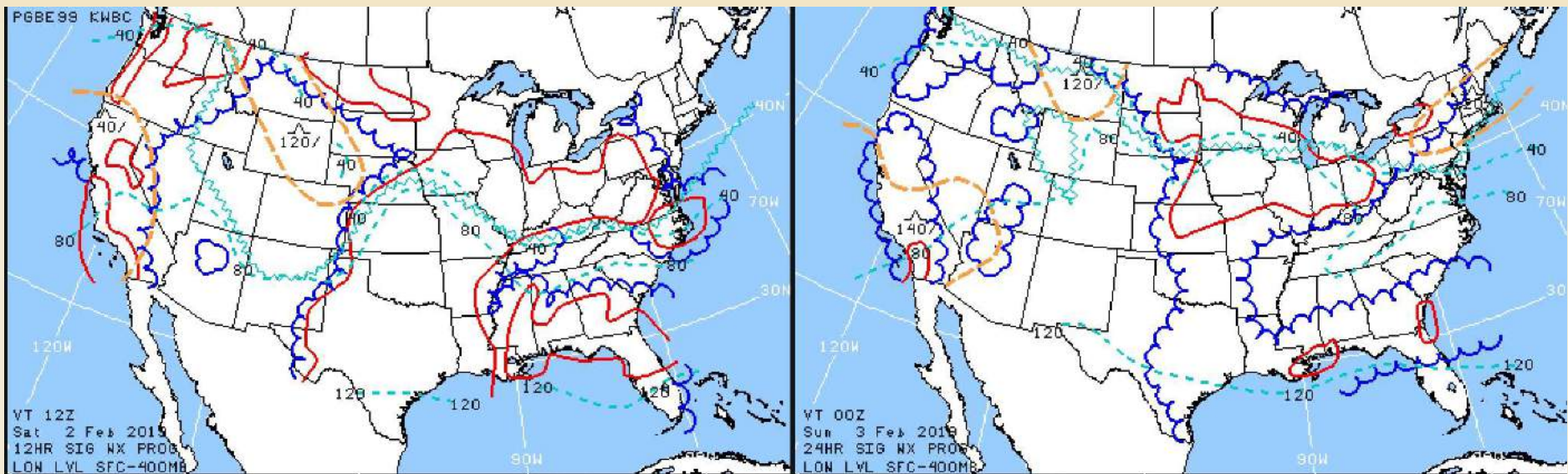
Sigmat Turbulence

Turbulence SIGMETs (red)

chart created at 0205 UTC Sun 03 Feb 2019



Significant Weather



Flight planning only. See TAFs for specific terminal forecast.

ceiling less than 1000 ft and/or
visibility less than 3 miles

ceiling 1000-3000 ft inclusive
and/or visibility 3-5 miles incl

moderate or greater
turbulence

freezing level above mean sea level
freezing level at surface
Tstorms imply possible svr or greater turb, svr icing and LLWS.

TFRs

Plain Text NEXTGEN View **Standard Brief** VFR N739MB C172/G KSZP [030200 65](#) KPRB 0130 50nm Register for Briefing Updates


Adverse Cond Synopsis/Surface Analysis Current Wx Forecasts NOTAMS Flow Control UOA Misc All

TFR (0) Closed/Unsafe NOTAMS (0) Conv SIG SIGMET AIRMET UUA (0) CWA (0) Severe Weather (0)

The published TFRs and special notices around sporting events, power plants, dams, refineries, military facilities, correctional and law enforcement facilities, as well as all other published NOTAMS, are available in the [Notices to Airmen Publication \(NTAP\)](#).

No current Temporary Flight Restrictions data for this briefing.

Temporary Flight Restrictions on **Terrain & Color Map** Sectionals



Wx **None** Animate Wx Configure Map

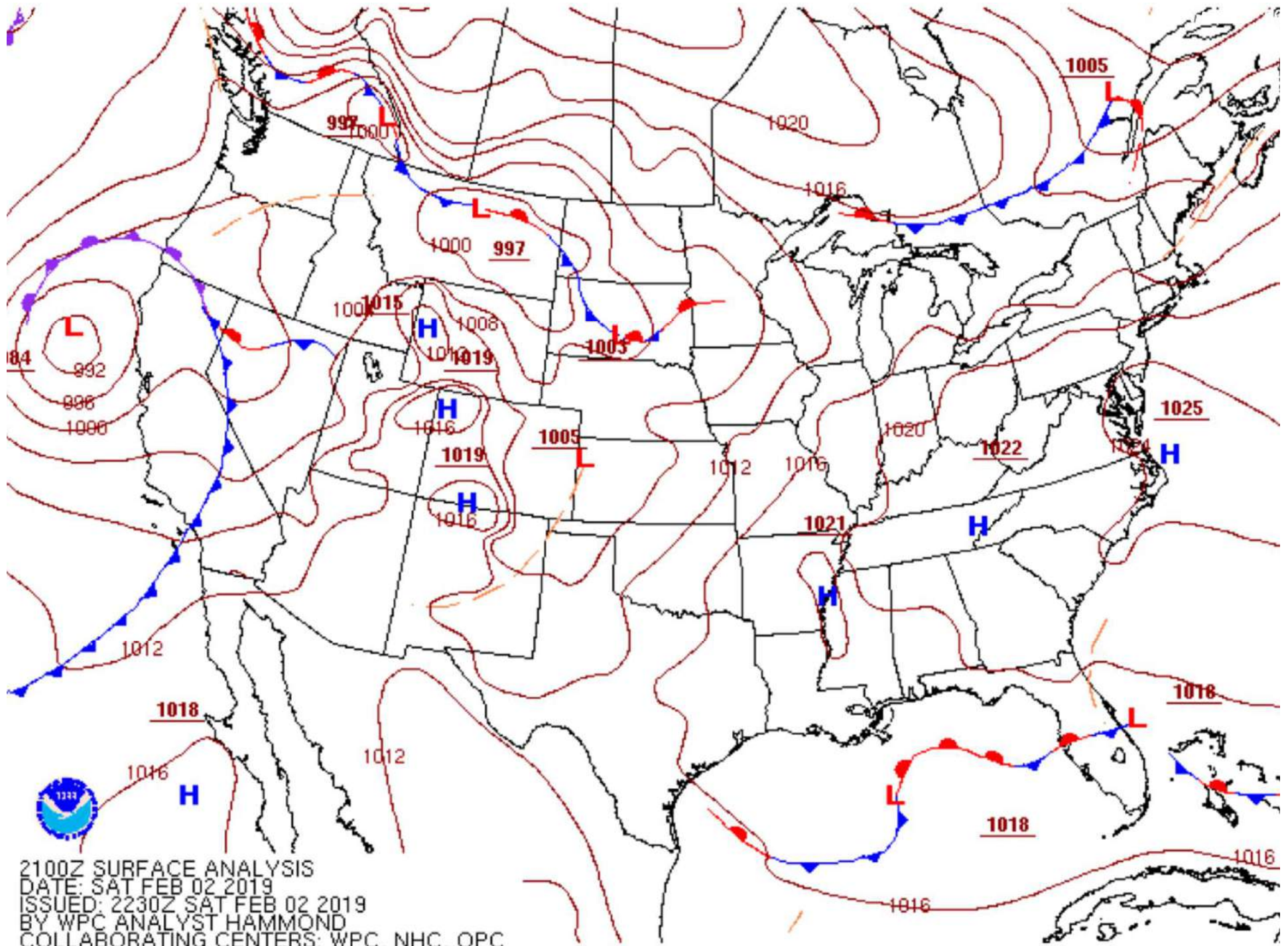
Supplemental Wx

— TFR - VIP or Active — TFR - Firefighting — TFR - Scheduled

Forgot to check for TFRs

Monitor 121.5





2100Z SURFACE ANALYSIS
 DATE: SAT FEB 02 2019
 ISSUED: 2230Z SAT FEB 02 2019
 BY WPC ANALYST HAMMOND
 COLLABORATING CENTERS: WPC, NHC, OPC

Surface Analysis

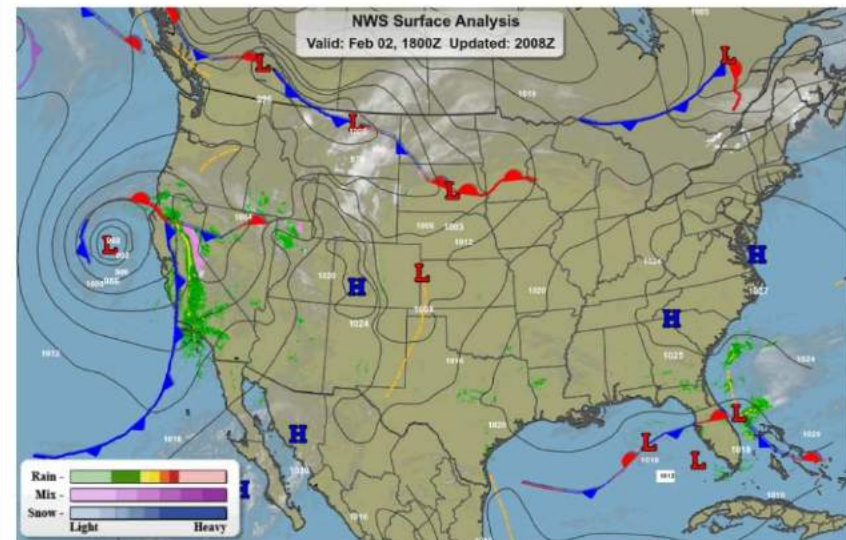
Plain Text NEXTGEN View **Standard Brief** VFR N739MB C172/G KSZP [030200 65](#) KPRB 0130 50nm [Register for Briefing Updates](#)  

Adverse Cond **Synopsis/Surface Analysis** Current Wx Forecasts NOTAMS Flow Control UOA Misc All

Note: To view radar summary charts, select the Supplemental Wx button.

Surface Analysis Chart (current data unavailable)

Weather Graphic is Not Current.



Wx Charts

Winds & Temp. aloft

Plain Text NEXTGEN View **Standard Brief** VFR N739MB C172/G KSZP [030200 65](#) KPRB 0130 50nm [Register for Briefing Updates](#)

Adverse Cond Synopsis/Surface Analysis Current Wx **Forecasts** NOTAMS Flow Control UOA Misc All

Clouds Vis, Sfc Winds & Precip Terminal Forecast **Winds Aloft** Area Forecast (0)

Altitudes within 4000 feet

Altitude

Station ID	030	045 Filed- 2k	060	065 Filed	085 Filed+2k
030000Z 2000-0300Z					
WJF			220039+01	216040+00	203048-03
ONT	210026	210034	210043+05	210043+04	210045+00
SBA	230007	230015	230023-01	230024-02	230028-06
FAT	190021	195022	200024-01	201024-02	208025-06
030600Z 0300-1200Z					
WJF			230034-01	231034-01	238037-04
ONT	240009	235016	230023-01	230024-01	230030-05
SBA	190015	205022	220030-02	223031-02	236037-05
FAT	150030	155029	160028-02	163028-03	176028-07
031800Z 1200-0000Z					
WJF			240027+02	243027+01	256031-02
ONT	210018	230019	250020+01	251021+00	258026-03
SBA	250009	245013	240017+01	240018+00	240024-03

Forecast Period

270023+18
 Heading ——— Temperature (°C)
 Speed (knots)

Weather Reporting Stations on Sectionals

Wx:

Supplemental Wx

LGTVRB 5kt 15kt 60kt No Data

METAR

Plain Text NEXTGEN View Standard Brief VFR N739MB C172/G KSZP [030200 65](#) KPRB 0130 50nm Register for Briefing Updates

Adverse Cond Synopsis/Surface Analysis **Current Wx** Forecasts NOTAMs Flow Control UOA Misc All

METAR PIREP

Click to view METAR summaries
METARs grouped & summarized for segments of your flight

Station nearest Departure:

- VFR KCMA 022355Z 27012KT 10SM -RA FEW022 BKN031 BKN040 14/10 A2974 RMK AO2 WSHFT2259 RAB45 SLP080 P0006 60074 T01440100 10167 20133 53002

Route:

- VFR KNTD 022357Z 28013KT 10SM FEW014 SCT025 SCT045 15/09 A2975 RMK AO2 SLP076 VCSH N AND E 60037 T01500094 10161 20133 53001 \$
- MVFR KOXR 022351Z 27012KT 10SM SCT015 BKN025 14/10 A2974 RMK AO2 SLP069 60034 T01390100 10156 20128 53001 \$
- VFR SP KSBA 030007Z 28007KT 10SM SCT025 BKN055 14/11 A2974 RMK AO2 T01440106
- VFR KIZA 030015Z AUTO 24007KT 10SM SCT031 SCT055 11/10 A2972 RMK AO2
- VFR KLPC 022356Z AUTO 23010KT 10SM FEW030 14/09 A2970 RMK AO2 SLP062 60008 T01440089 10156 20139 53004
- VFR KVBG 022358Z AUTO 23012KT 9SM CLR 14/10 A2971 RMK AO2 SLP064 60000 T01420095 10159 20130 53003 \$
- VFR KSMX 022351Z 23012G20KT 7SM SCT029 15/09 A2970 RMK AO2 SLP065 60002 T01500094 10161 20133 53002

METARs on Terrain & Color Map Sectionals

Wx Mosaic Composite 10m Animate Wx Configure Map

Supplemental Wx

● VFR ● MVFR ● IFR ● LIFR ● Unknown
Color-coding based on ceiling and visibility only

Terminal Area forecasts

Plain Text NEXTGEN View **Standard Brief** VFR N739MB C172/G KSZP 030200 65 KPRB 0130 50nm [Register for Briefing Updates](#)

Adverse Cond Synopsis/Surface Analysis Current Wx **Forecasts** NOTAMs Flow Control UOA Misc All

Clouds Vis, Sfc Winds & Precip **Terminal Forecast** Winds Aloft Area Forecast (0)

Terminal Area Forecasts
Flight passes by the TAF forecast stations at the times in gray boxes shown below.

No TAF stations within 5 nm of departure. For additional forecast information, please refer to other forecast sections in this briefing.

Passing Time [What's this?](#)

0200Z	VFR	TAF AMD KCMA 022354Z 0300/0324 30010KT P6SM VCSH SCT015 SCT022 BKN035
+60min →	VFR	FM030300 25007KT P6SM VCSH SCT025 OVC040
	VFR	FM030600 30009KT P6SM -SHRA SCT025 OVC040
	MVFR	FM030900 12012KT P6SM -SHRA SCT015 OVC025
	MVFR	FM031400 16009KT 4SM -SHRA SCT008 OVC015
	MVFR	FM031800 25005KT 4SM -SHRA BR SCT008 OVC015
	IFR	FM032100 24007KT 4SM -SHRA BR OVC007 =
0200Z	MVFR	TAF KNTD 0223/0323 26010KT 9999 VCTS FEW008 SCT015CB BKN030 BKN100 600000 520106 530709 QNH2969INS
	MVFR	TEMPO 0223/0303 26015G20KT FEW008 BKN015 BKN030 OVC100
	MVFR	BECMG 0306/0307 24010KT 9999 FEW015 BKN030 BKN100 640507 531206 QNH2978INS
	MVFR	FM031100 24010KT 8000 BR VCSH SCT010 BKN025 OVC100 640507 531206 QNH2983INS
	IFR	TEMPO 0312/0318 22012G20KT 8000 -SHRA BR BKN009 OVC020
	IFR	FM031800 22010KT 8000 -SHRA BKN009 OVC020 QNH2980INS T11/0312Z T15/0321Z FS30134 =
0204Z	IFR	TAF AMD KOXR 022352Z 0300/0324 24008KT P6SM VCSH BKN008 BKN035
+66min →	VFR	FM030300 25007KT P6SM VCSH SCT025 OVC050

Terminal Area Forecasts on **Terrain & Color Map**

Summarized graphic created at 0026Z

Animate Wx Configure Map Supplemental Wx

● VFR ● MVFR ● IFR ● LIFR ● Unknown

Color-coding based on ceiling and visibility only

Passing Time
-1 hour | 0200Z | +1 hour

Destination NOTAMs

Plain Text NEXTGEN View **Standard Brief** VFR N739MB C172/G KSZP [030200 65](#) KPRB 0130 50nm [Register for Briefing Updates](#)

Adverse Cond Synopsis/Surface Analysis Current Wx Forecasts **NOTAMs** Flow Control UOA Misc All

Departure **Destination** En Route Gen FDC Intl Uncategorized (0)

All published NOTAMs are available in the [Notices to Airmen Publication \(NTAP\)](#).

Navigation:
!PRB 02/001 PRB NAV VORTAC **OUT OF SERVICE** 1902051630-1902052330

Communication:
None

Service:
None

Obstruction within 10 nm:
None

Airspace within 10 nm:
None

Special Use Airspace within 10 nm:
None

Runway:
None

Taxiway:
None

Apron:
None

Aerodrome:
None

Flight on **Terrain & Color Map** Sectionals

Wx **None** [Animate Wx](#) [Configure Map](#)

[Supplemental Wx](#)

- Prohibited Area
- Restricted Area
- Military Training Route
- Airspace
- Obstruction (Point)
- Obstruction (Area)

Navigation NOTAMS

Search Search [...] Flight Ser... **Weath...** Flight Ser... Navigatio... - Schedul... Apply in I... IACRA - F... Favorites

Plain Text NEXTGEN View **Standard Brief** VFR N739MB C172/G KSZP [030200 65](#) KPRB 0130 50nm Register for Briefing Updates

Adverse Cond Synopsis/Surface Analysis Current Wx Forecasts **NOTAMS** Flow Control UOA Misc All

Departure Destination **En Route** Gen FDC Intl Uncategorized (0)

NAV COM (0) SVC OBST AIRSPACE SUA (0) RWY/TWY/APRON/AD/FDC Other/Unverified (0) Mil

All published NOTAMS are available in the [Notices to Airmen Publication \(NTAP\)](#).

VOR VOR-DME VORTAC NDB
 DME TACAN ILS Other


!HHR 12/053 VTU NAV VOR/DME NOT MNT 1812191401-1903272100EST

!OXR 12/002 OXR NAV VOR GND REC CHECKPOINT **OUT OF SERVICE** 1812031839-1906032111EST

!HHR 02/004 GVO NAV TACAN AZM **OUT OF SERVICE** 1902021451-1902062100

!SMX 02/002 KSMX NAV ILS RWY 12 DME **OUT OF SERVICE** 1902021949-1902062100EST

NavAid NOTAMS on Terrain & Color Map Sectionals



Wx None

VOR DME VOR-DME TACAN VORTAC ILS NDB Other

NOTAM Condition: Out of Service Unusable Standard

FDC NOTAMs

Plain Text NEXTGEN View Standard Brief VFR N739MB C172/G KSZP 030700 45 KOXR 50nm Register for Briefing Updates

Adverse Cond Synopsis/Surface Analysis Current Wx Forecasts **NOTAMs** Flow Control UOA Misc All

Departure Destination En Route **Gen FDC** Intl Uncategorized (0)

All published NOTAMs are available in the [Notices to Airmen Publication \(NTAP\)](#).

ARTCC NOTAMs

!FDC 9/6845 KZLA CA..ROUTE ZLA. V372 KAYOH, CA MCA 8000 EASTBOUND. 25 JAN 14:28 2019 UNTIL 25 JAN 14:28 2021 ESTIMATED. CREATED: 25 JAN 14:29 2019

!FDC 9/6843 KZLA CA..ROUTE ZLA. V283 KAYOH, CA MCA 8000 EASTBOUND. 25 JAN 14:26 2019 UNTIL 25 JAN 14:26 2021 ESTIMATED. CREATED: 25 JAN 14:27 2019


!FDC 9/6264 KZLA CA..ROUTE ZLA. V442 PARADISE (PDZ) VORTAC, CA TO APLES, CA MEA 10000. 23 JAN 20:16 2019 UNTIL 23 JAN 20:16 2021 ESTIMATED. CREATED: 23 JAN 20:17 2019

!FDC 8/7393 KZLA CA..ROUTE ZLA ZOA. V459 FRIANT (FRA) VORTAC, CA R-142 TO EXTRA INT, CA MEA 5700. 15 NOV 17:05 2018 UNTIL 15 NOV 17:02 2020 ESTIMATED. CREATED: 15 NOV 17:05 2018

!FDC 8/3744 KZLA CA..ROUTE ZLA. V64 LOS ANGELES (LAX) VORTAC, CA R-170 TO LIMBO INT, CA MEA 3300. 20 DEC 20:13 2018 UNTIL 21 DEC 20:10 2020 ESTIMATED. CREATED: 20 DEC 20:13 2018

!FDC 4/3635 KZLA SPECIAL SECURITY NOTICE. DISNEYLAND THEME PARK, ANAHEIM, CA. THIS NOTAM REPLACES NOTAM 9/5145 TO REFLECT A TRANSPORTATION SECURITY ADMINISTRATION (TSA)WEBSITE UPDATE AND ADDITIONAL INFORMATION CONCERNING AIRSPACE WAIVERS. FLIGHT RESTRICTIONS IN THIS NOTAM COMPLY WITH STATUTORY MANDATES DETAILED IN SECTION 352 OF PUBLIC LAW 108-7 AS AMENDED BY SECTION 521 OF PUBLIC LAW 108-199. PURSUANT TO 49 USC 40103(B), THE FEDERAL AVIATION ADMINISTRATION (FAA) CLASSIFIES THE AIRSPACE DEFINED IN THIS NOTAM AS 'NATIONAL DEFENSE AIRSPACE'. ANY PERSON WHO KNOWINGLY OR WILLFULLY VIOLATES THE RULES PERTAINING TO OPERATIONS IN THIS AIRSPACE MAY BE SUBJECT TO CERTAIN CRIMINAL PENALTIES UNDER 49 USC 46307. PILOTS WHO DO NOT ADHERE TO THE FOLLOWING PROCEDURES MAY BE INTERCEPTED, DETAINED AND INTERVIEWED BY LAW ENFORCEMENT/SECURITY PERSONNEL. PURSUANT TO 14 CFR SECTION 99.7. SPECIAL SECURITY INSTRUCTIONS: ALL AIRCRAFT FLIGHT

Flight on Terrain & Color Map Sectionals



Wx None

PIREP uncoded

Plain Text NEXTGEN View **Standard Brief** VFR N739MB C172/G KSZP [030200 65](#) KPRB 0130 50nm Register for Briefing Updates

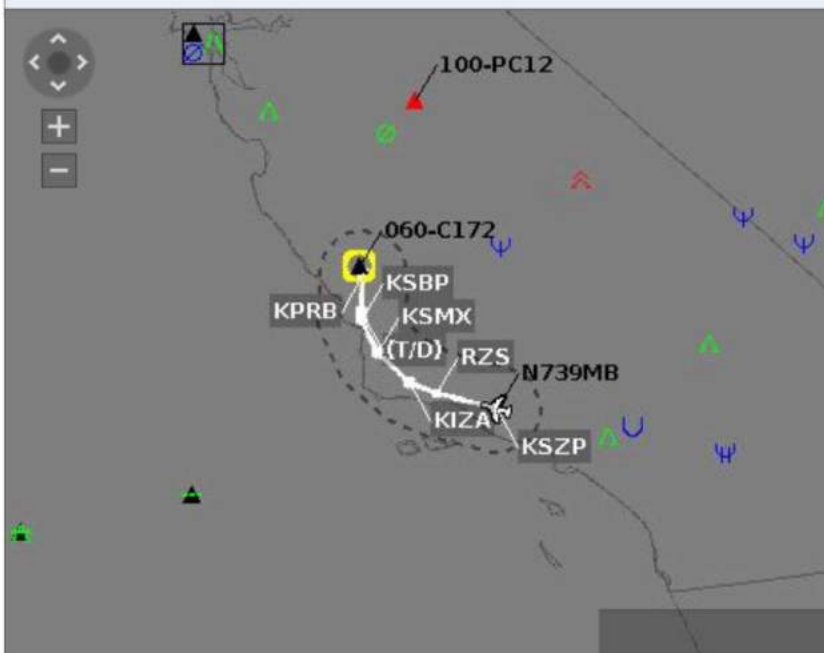
Adverse Cond Synopsis/Surface Analysis **Current Wx** Forecasts NOTAMS Flow Control UOA Misc All

METAR **PIREP**

1 of 1 PIREPs
Selected PIREP is highlighted on map

Details 1
UA /OV PRB340005/TM 2351/FL060/TP C172/TA 02/IC TR RIME/RM ZOA CWSU =

PIREPs on Monochrome Dark Map Sectionals



Map showing flight path and PIREPs. Key locations include KPRB, KSBP, KSMX, (T/D), RZS, N739MB, KIZA, and KSZP. PIREPs are labeled: 100-PC12, 060-C172. The map is in Monochrome Dark Map mode.

Wx None

Supplemental Wx

ICING NEG TRC TRC-LGT LGT LGT-MDT MDT MDT-SVR SVR

PIREP decoded 😊

Plain Text NEXTGEN View Standard Brief VFR N739MB C172/G KSZP [030200 65](#) KPRB 0130 50nm Register for Briefing Updates

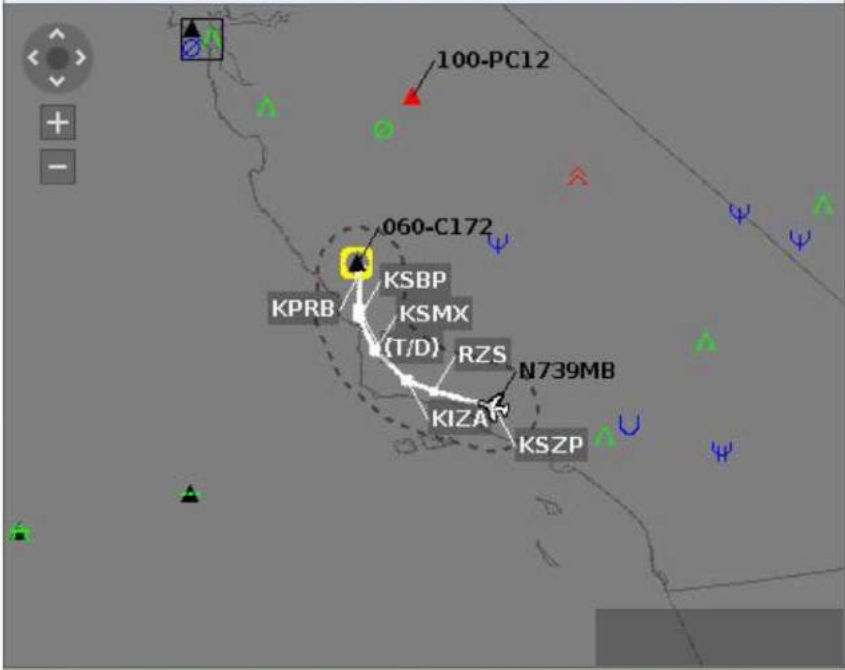
Adverse Cond Synopsis/Surface Analysis **Current Wx** Forecasts NOTAMS Flow Control UOA Misc All

METAR **PIREP**

1 of 1 PIREPs
Selected PIREP is highlighted on map

Details 1
Over PRB, 340° radial at 5 nautical miles, Time: 2351Z, Altitude: 6,000 feet, A/C Type: CESSNA 172, Temperature: 2° C, Icing: Trace rime, Remarks: Oakland Center (ZOA) Central Weather Service Unit

PIREPs on Monochrome Dark Map Sectionals



Map showing flight path and PIREP location. The path includes airports KPRB, KSBP, KSMX, (T/D), RZS, N739MB, KIZA, and KSZP. A PIREP is marked with a yellow triangle at 100-PC12. Other PIREPs are marked with green and blue symbols.

Wx None Animate Wx Configure Map

Supplemental Wx

ICING NEG TRC TRC-LGT LGT LGT-MDT MDT MDT-SVR SVR

**GO/NO GO
decision based
on briefing**



ATIS - ASOS - AWOS

- Ceilings
- Wind direction
- Wind speed
- Temperature
- Dew point
- Altimeter



***Get it
ALL!***

Land and Hold Short Operations

154

CALIFORNIA

LONG BEACH (DAUGHERTY FLD) (LGB)(KLGB) 3 NE UTC-8(-7DT) N33°49.08' W118°09.11' LOS ANGELES
 60 B LRA Class I, ARFF Index C NOTAM FILE LGB COPTER
 RWY 12-30: H10000X200 (ASPH-GRVD) S-30, D-200, 2S-175, H-4I, L-3E, 4G, A
 2D-300 PCN 62 F/A/X/T HIRL CL IAP, AD
 RWY 12: REIL. PAPI(P4L)—GA 3.0° TCH 70'. RVR-R Thld dsplcd
 1350'. Fence. 0.4% down.
 RWY 30: MALS. TDZL. PAPI(P4L)—GA 3.0° TCH 73'. RVR-T Thld
 dsplcd 2000'. Tree. 0.3% up.
 RWY 08L-26R: H6192X150 (ASPH-PFC) S-30, D-70, 2D-110
 PCN 54 F/B/W/T HIRL
 RWY 08L: Thld dsplcd 1305'. Pole.
 RWY 26R: REIL. PAPI(P4L)—GA 3.1° TCH 62'. Thld dsplcd 532'.
 Road. Rgt tfc.
 RWY 08R-26L: H3918X100 (ASPH) S-30, D-75 MIRL 0.5% up W
 RWY 08R: REIL. PAPI(P4L)—GA 3.0° TCH 38'. Tower. Rgt tfc.
 RWY 26L: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Trees.

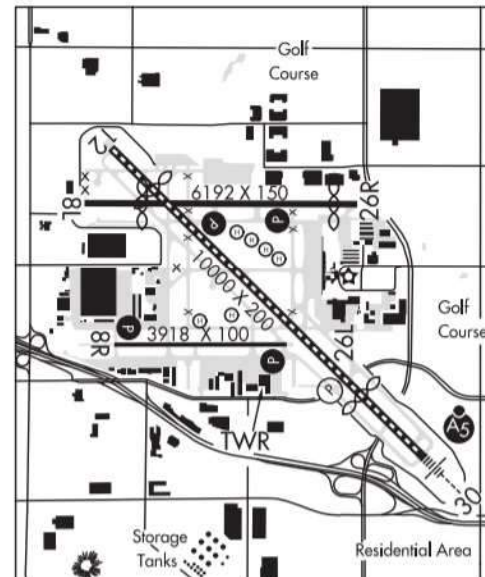
LAND AND HOLD-SHORT OPERATIONS

LDG RWY	HOLD-SHORT POINT	AVBL LDG DIST
RWY 12	08R-26L	4740
RWY 26R	12-30	3400
RWY 30	08L-26R	5850

RUNWAY DECLARED DISTANCE INFORMATION

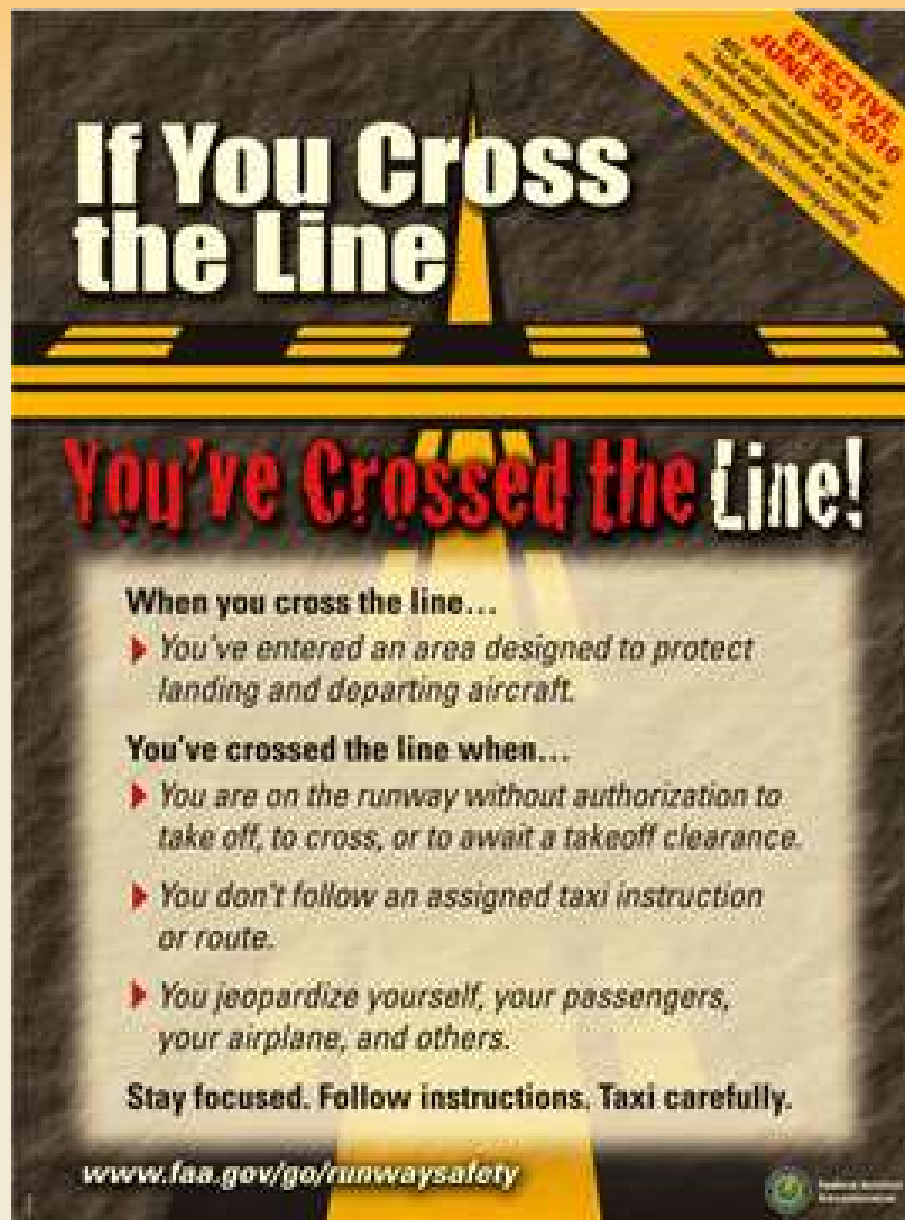
RWY 08L:TORA-6192	TODA-6192	ASDA-6192	LDA-4887
RWY 08R:TORA-3918	TODA-3918	ASDA-3918	LDA-3918
RWY 12: TORA-10000	TODA-10000	ASDA-10000	LDA-8650
RWY 26L:TORA-3918	TODA-3918	ASDA-3918	LDA-3918
RWY 26R:TORA-6192	TODA-6192	ASDA-6192	LDA-5660
RWY 30: TORA-10000	TODA-10000	ASDA-9417	LDA-7415

SERVICE: S4 FUEL 100LL, JET A OX 1, 2, 3, 4 LGT When twr clsd ACTIVATE MALS. Rwy 30, PAPI Rwy 12, 08R, 26L and Rwy 26R—CTAF; HIRL Rwy 12-30 lgtd during hrs twr clsd. REIL Rwy 08R, 12, 26L and Rwy 26R, HIRL Rwy 08L-26R, MIRL Rwy 08R-26L, TDZL and CL lghts Rwy 12-30 not avbl when twr clsd. PAPI Rwy 30 opr continuously.



Runway Incursions

Happen when an unauthorized person, vehicle or aircraft is on a active runway.

A safety poster from the FAA titled "If You Cross the Line" and "You've Crossed the Line!". The poster features a background of a runway with a yellow centerline and dashed white edge lines. A yellow banner in the top right corner states "EFFECTIVE JUNE 30, 2010". The main text is in white and red. The bottom of the poster includes the website "www.faa.gov/go/runwaysafety" and the FAA logo.

If You Cross the Line

You've Crossed the Line!

When you cross the line...

- ▶ *You've entered an area designed to protect landing and departing aircraft.*

You've crossed the line when...

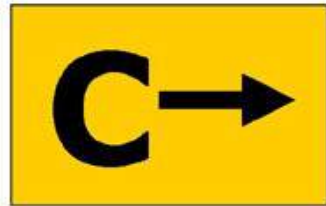
- ▶ *You are on the runway without authorization to take off, to cross, or to await a takeoff clearance.*
- ▶ *You don't follow an assigned taxi instruction or route.*
- ▶ *You jeopardize yourself, your passengers, your airplane, and others.*

Stay focused. Follow instructions. Taxi carefully.

www.faa.gov/go/runwaysafety

Airport Markings

Flight Environment Airport Signs



Density Altitude

- Pressure altitude and temperature
- Calculations
- Effects of high density altitude



Climb Data

PERFORMANCE

MODEL 172N

RATE OF CLIMB

MAXIMUM

CONDITIONS:
Flaps Up
Full Throttle

NOTE:
Mixture leaned above 3000 feet for maximum RPM.

WEIGHT LBS	PRESS ALT FT	CLIMB SPEED KIAS	RATE OF CLIMB - FPM			
			-20°C	0°C	20°C	40°C
2300	S.L.	73	875	815	755	695
	2000	72	765	705	650	590
	4000	71	655	600	545	485
	6000	70	545	495	440	385
	8000	69	440	390	335	280
	10,000	68	335	285	230	---
	12,000	67	230	180	---	---

Figure 5-5. Rate of Climb



PERFORMANCE

TIME, FUEL, AND DISTANCE TO CLIMB

MAXIMUM RATE OF CLIMB

CONDITIONS:
Flaps Up
Full Throttle
Standard Temperature

- NOTES:
1. Add 1.1 gallons of fuel for engine start, taxi and takeoff allowance.
 2. Mixture leaned above 3000 feet for maximum RPM.
 3. Increase time, fuel and distance by 10% for each 10°C above standard temperature.
 4. Distances shown are based on zero wind.

WEIGHT LBS	PRESSURE ALTITUDE FT	TEMP °C	CLIMB SPEED KIAS	RATE OF CLIMB FPM	FROM SEA LEVEL		
					TIME MIN	FUEL USED GALLONS	DISTANCE NM
2300	S.L.	15	73	770	0	0.0	0
	1000	13	73	725	1	0.3	2
	2000	11	72	675	3	0.6	3
	3000	9	72	630	4	0.9	5
	4000	7	71	580	6	1.2	8
	5000	5	71	535	8	1.6	10
	6000	3	70	485	10	1.9	12
	7000	1	69	440	12	2.3	15
	8000	-1	69	390	15	2.7	19
	9000	-3	68	345	17	3.2	22
	10,000	-5	68	295	21	3.7	27
	11,000	-7	67	250	24	4.2	32
	12,000	-9	67	200	29	4.9	38

Figure 5-6. Time, Fuel, and Distance to Climb

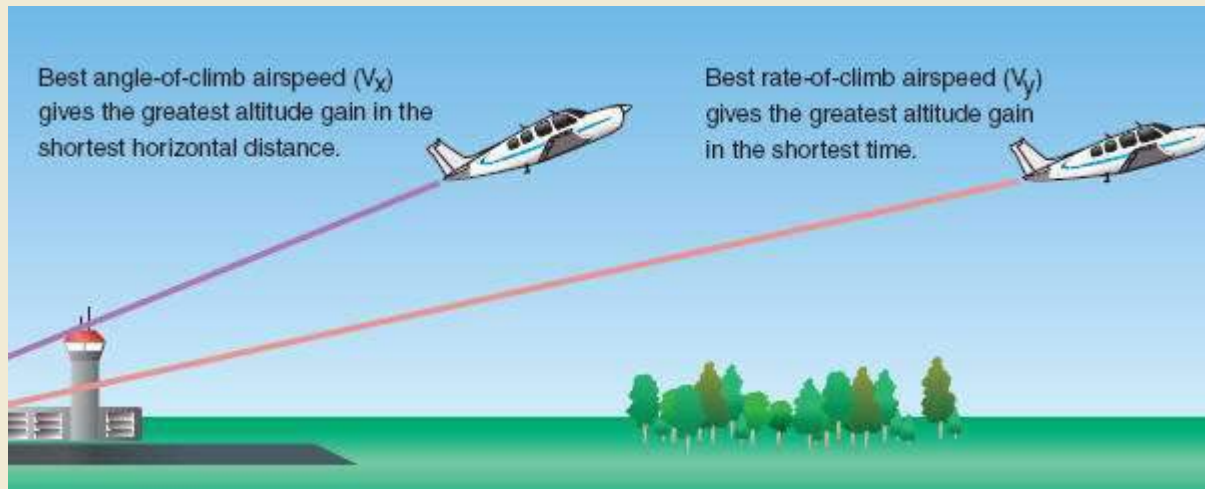
V Speeds

- V_a
- V_y
- V_x
- V_g
- V_s
- V_{so}
- V_{fe}
- V_{ne}

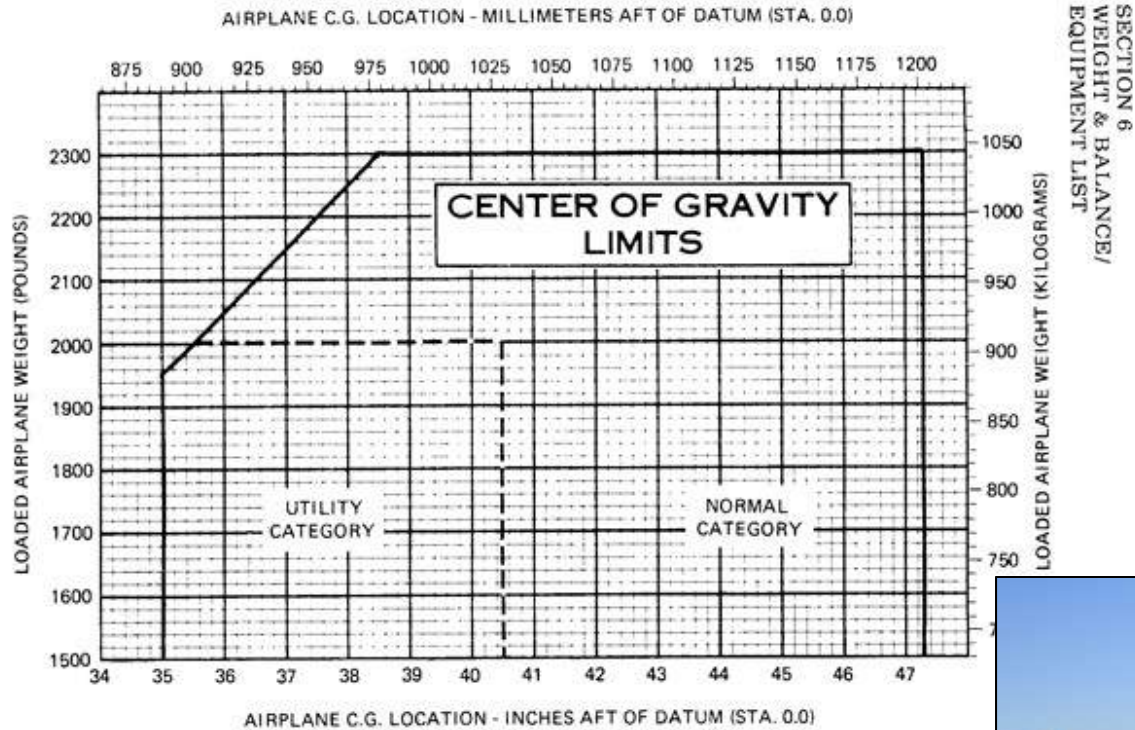


Best Rate vs Best Angle

- V_x – Best Angle
- V_y – Best Rate



Weight & Balance



Emergency Procedures

- PARE (spin recovery)
- Engine Failure
- Engine Fire
- Electrical Fire



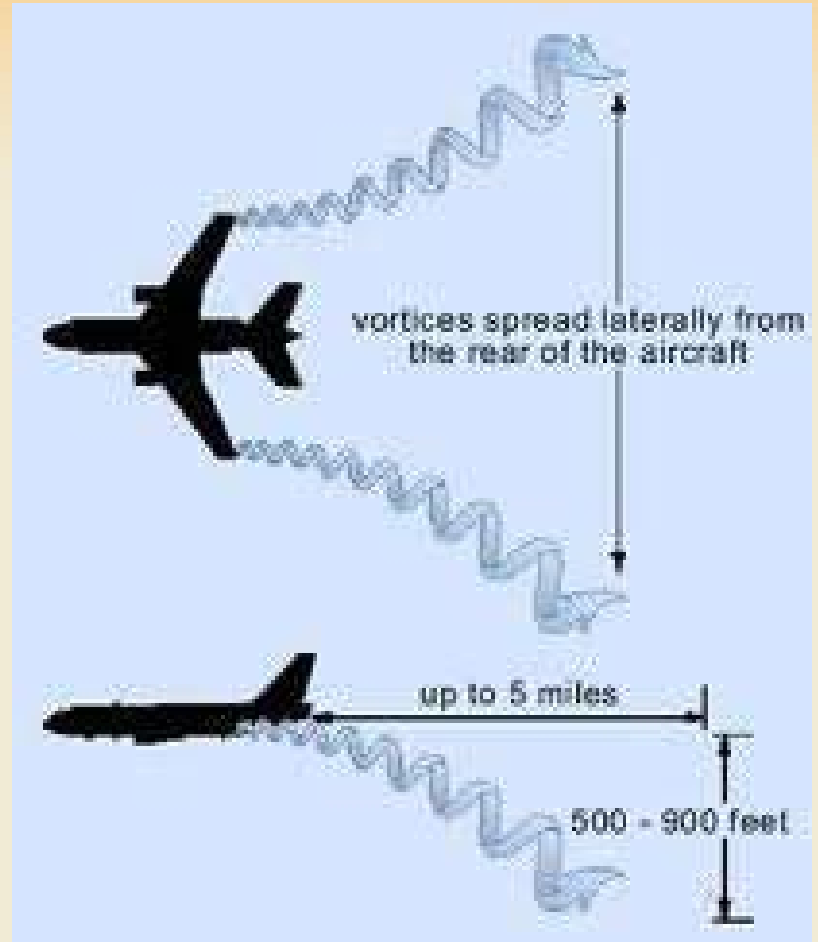






Wake Turbulence

How do we avoid it?



Flying Tips

Brief Passengers

Safety belts

Air vents

Fire extinguisher

Exit doors & Emergencies

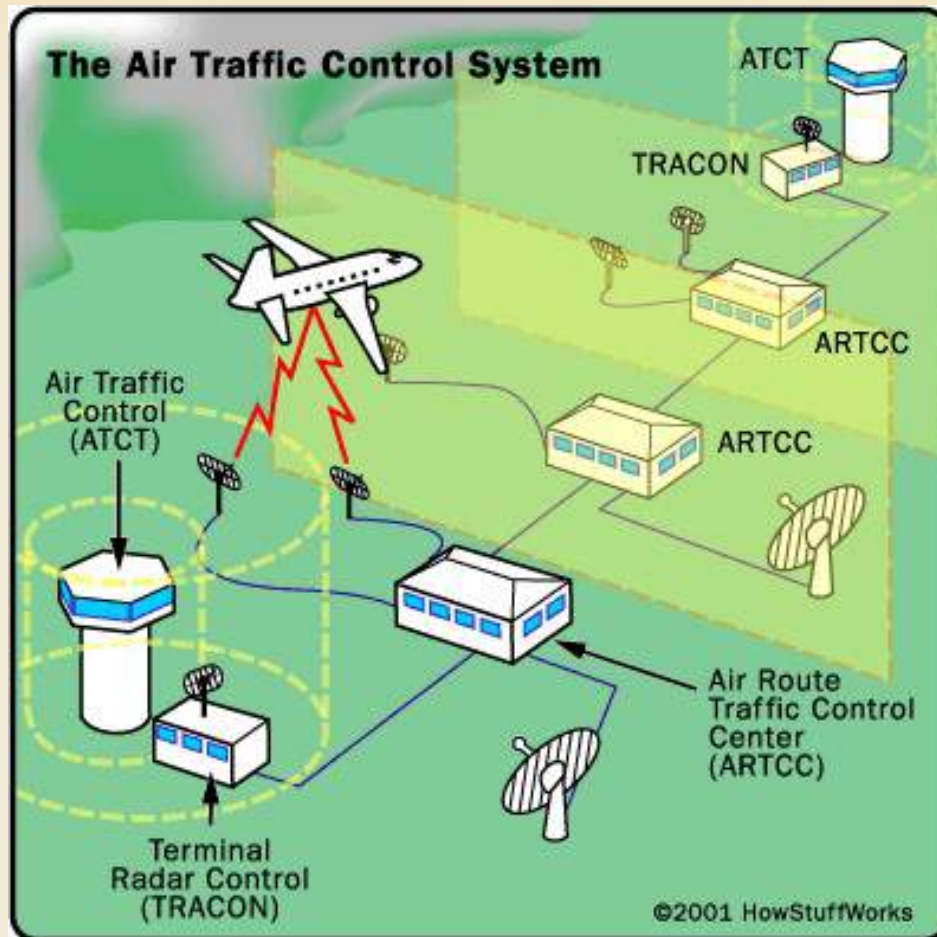
Traffic & Talking

Your questions (Speak up!)



Flying Tips

Learn to be a good communicator



LiveATC.net
Live Air Traffic – From Their Headsets to You.



Don't Forget

“A Good Pilot is Always Learning”



Emergency Maneuver Training Scholarship



In Memory of Vicki Cruse
www.cpaviation.com