



VMC Club Meeting

San Luis Obispo
August 20, 2026

Notes are at
SLOPilots.org/VMC



Sponsored By





Facilitator

John Scarry AGI/IGI

President EAA 170

Pilot since 2000, Instrument rating 2019

1,100 hours all but about 5 minutes VFR

82 Airports, 3/4 in California

No accidents or close calls

A couple of flat spots on tires from bad landings.

A few hangar rash incidents.

I want to keep it that way.



Meeting Format

- ☑ Meeting is intended to last approximately 1 hour
- ☑ This is not an instructional event, it is a forum to foster open discussion
- ☑ There are ~~no~~ right and wrong answers
- ☑ There may be multiple conflicting right answers
Some answers are definitely wrong
- ☑ Today's Objective: Cover the ground portion of the Flight Review and develop a plan for **your** flight portion of the review.



Flight Review

§ 61.56 Flight review.

(a) ...a flight review consists of a minimum of 1 hour of flight training and **1 hour of ground training**. The review must include:

- (1) A review of the current general operating and flight **rules of part 91** of this chapter; and...
- (2) A review of those maneuvers and procedures that, at the discretion of the person giving the review, are necessary for the pilot to demonstrate the safe exercise of the privileges of the pilot certificate.



Flight Review

§ 61.56 Flight review.

(c) ...no person may act as pilot in command of an aircraft unless, since the beginning of the 24th calendar month before the month in which that pilot acts as pilot in command, that person has—

(1) Accomplished a flight review given **in an aircraft for which that pilot is rated** by an authorized instructor and ...

Things that count as a flight review.

Successful checkride for a new pilot certificate, rating, or operating privilege.

IFR Proficiency check, new panel checkout, insurance checkout, tailwheel endorsement, complex endorsement, high-performance endorsement, if you do the 1 hour of ground and log it as a review.

A student pilot need not accomplish the flight review required by this section provided the student pilot is undergoing training for a certificate and has a current (every 90 days) solo flight endorsement.



**Are there any memorable Flight
Reviews that you have had?
Recommendations?**



§ 61.23 Medical certificates: Requirement and duration.

(c) Operations requiring either a medical certificate or U.S. driver's license.

(ii) Exercising the privileges of a sport pilot certificate in an aircraft meeting the performance limits and design requirements of § 61.316 [performance limits: max 4 seats and $V_{S1} \leq 59$ kts, V_{S1} = clean; flaps up and gear retracted]...

§ 61.315 What are the privileges and limits of my sport pilot certificate?

(c) You may not act as pilot in command of an aircraft:

(4) While carrying more than one passenger.

(5) At night, except as provided in § 61.329. [At least Basic Med]

(11) At an altitude of more than 10,000 feet MSL or 2,000 feet AGL, whichever is higher.

(13) Without visual reference to the surface.

Note: Student pilots have this same limitation.



Sport Pilot – Medical Limitations

§ 61.303 (b) A person using a U.S. driver's license to meet the requirements of this paragraph must—

(1) Comply with each restriction and limitation imposed by that person's U.S. driver's license and any judicial or administrative order applying to the operation of a motor vehicle;

(4) Not know **or have reason to know** of any medical condition that would make that person unable to operate an aircraft in a safe manner.

You aren't required to follow the rules for Basic Med, but you should be familiar with them and decide with your doctor if you are safe to fly.

The course is worth taking every couple of years.

[AOPA](#) has a good one.

<https://basicmedicalcourse.aopa.org/>



Night

§ 1 Definitions

Night means the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time.

[Applies to logging and weather minimums.]

§ 91.209 Aircraft lights.

No person may:

(a) During the period from **sunset to sunrise** ... —

(1) Operate an aircraft unless it has lighted position lights;

§ 91.205

(c) Visual flight rules (night). For VFR flight at night...

(4) If the aircraft is operated **for hire**, one electric landing light.



Recent Experience—Night

§ 61.57 Recent flight experience: Pilot in command.

(b) Night takeoff and landing experience.

(1) Except as provided in paragraph (e) of this section [Doesn't apply to us], no person may act as pilot in command of an aircraft carrying persons during the period **beginning 1 hour after sunset and ending 1 hour before sunrise**, unless within the preceding 90 days that person has made at least three **takeoffs** and three landings to a **full stop** during the period beginning 1 hour after sunset and ending 1 hour before sunrise, and—

(i) That person acted as sole manipulator of the flight controls; and

(ii) The required takeoffs and landings were performed in an aircraft of the **same category, class, and type** (if a class or type rating is required).



Recent Experience

§ 61.57 Recent flight experience: Pilot in command.

(a) General experience.

(1) ...no person may act as a pilot in command of an aircraft carrying persons or of an aircraft certificated for more than one pilot flight crewmember unless that person has made at least **three takeoffs and three landings** within the **preceding 90 days**, and—

- (i) The person acted as the sole manipulator of the flight controls; and
- (ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if a class or type rating is required), and, if the aircraft to be flown is an airplane with a tailwheel, the takeoffs and landings must have been made to a **full stop in an airplane with a tailwheel**.



Flight Planning—Fuel

§ 91.151 Fuel requirements for flight in VFR conditions.

(a) No person may **begin** a flight in an airplane under VFR conditions unless (considering wind and forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed—

- (1) During the day, to fly after that for at least 30 minutes; or
- (2) At night, to fly after that for at least 45 minutes.

§ 91.167 Fuel requirements for flight in IFR conditions.

(a) No person may **operate** a civil aircraft in IFR conditions unless it carries enough fuel (considering weather reports and forecasts and weather conditions) to—

- (1) Complete the flight to the first airport of intended landing;
- (2) Except as provided in paragraph (b) of this section, fly from that airport to the alternate airport; and
- (3) Fly after that for 45 minutes at normal cruising speed...



Flight Planning—Fuel

Do you use the IFR requirement of having enough fuel to fly to your alternate and **then** for 45 minutes or an hour?

Do you use the IFR requirement of not **operating** a flight unless you have enough fuel to arrive at your destination with your minimum reserves?

Do you have different minimum fuel requirements at night?



Flight Planning—Runway Calculations

§ 91.103 Preflight action.

Each pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight. This information must include—

- (a) For a flight under IFR **or a flight not in the vicinity of an airport**, weather reports and forecasts, fuel requirements, **alternatives** available if the planned flight cannot be completed, and any known traffic delays of which the pilot in command has been advised by ATC;
- (b) For any flight, runway lengths at airports of intended use, and the following takeoff and landing distance information: ...

Note: This means that you must calculate the takeoff and landing distance taking into account the altitude and temperature (density altitude), runway slope, runway surface, aircraft gross weight, and wind. The rule of thumb is to adjust whatever number you come up with by a safety margin. What safety margin do you use?



Flight Planning—Minimum Safe Altitudes

§ 91.119 Minimum safe altitudes: General.

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

- (a) **Anywhere.** An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.
- (b) Over **congested areas.** Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of **1,000 feet** above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.
- (c) Over **other than congested areas.** An altitude of **500 feet** above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.



Flight Planning—Congested Area

In Richard D. Henderson, the FAA summarized the NTSB's guidelines for sustaining violations of the rule in cases where pilots operated aircraft over a small area consisting of approximately **ten houses and a school**, over the campus of a university, a **beach area** along a highway, and over **a boy's camp** where there were numerous people on the docks and children playing on the shore.

The opinion also noted that **no precise density of population, ground traffic or congestion, or description of the proximity of buildings, or number of residences has been devised.**

Consistent with these earlier opinions, in 2009, the NTSB found that a pilot had violated §91.119(c) by operating over the open water near the beach but **closer than 500 feet to persons on the beach**. The pilot also violated §119(b) by operating over an open air assembly of persons (several hundred people).

Legal Interpretation Simmons - (2010) Congested Areas



Weather—Within Boundaries of an Airport

91.155 Basic VFR weather minimums.

(c) Except as provided in § 91.157 [Special VFR], no person may **operate** an aircraft beneath the ceiling under VFR within the lateral boundaries of **controlled airspace** designated to the surface for an **airport** when the ceiling is less than **1,000 feet**.

(d) Except as provided in § 91.157 [Special VFR] of this part, **no person may take off or land an aircraft**, or enter the traffic pattern of an airport, under VFR, within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport—

- (1) Unless **ground visibility** at that airport is at least **3 statute miles**; or
- (2) If ground visibility is not reported at that airport, unless flight visibility during landing or takeoff, or while operating in the traffic pattern is at least 3 statute miles.

Note: This doesn't apply to an airport in Class G.



Airspace Memory Aid for Pilots

Rod Machado's Aviation Learning Center



becomeapilot.com

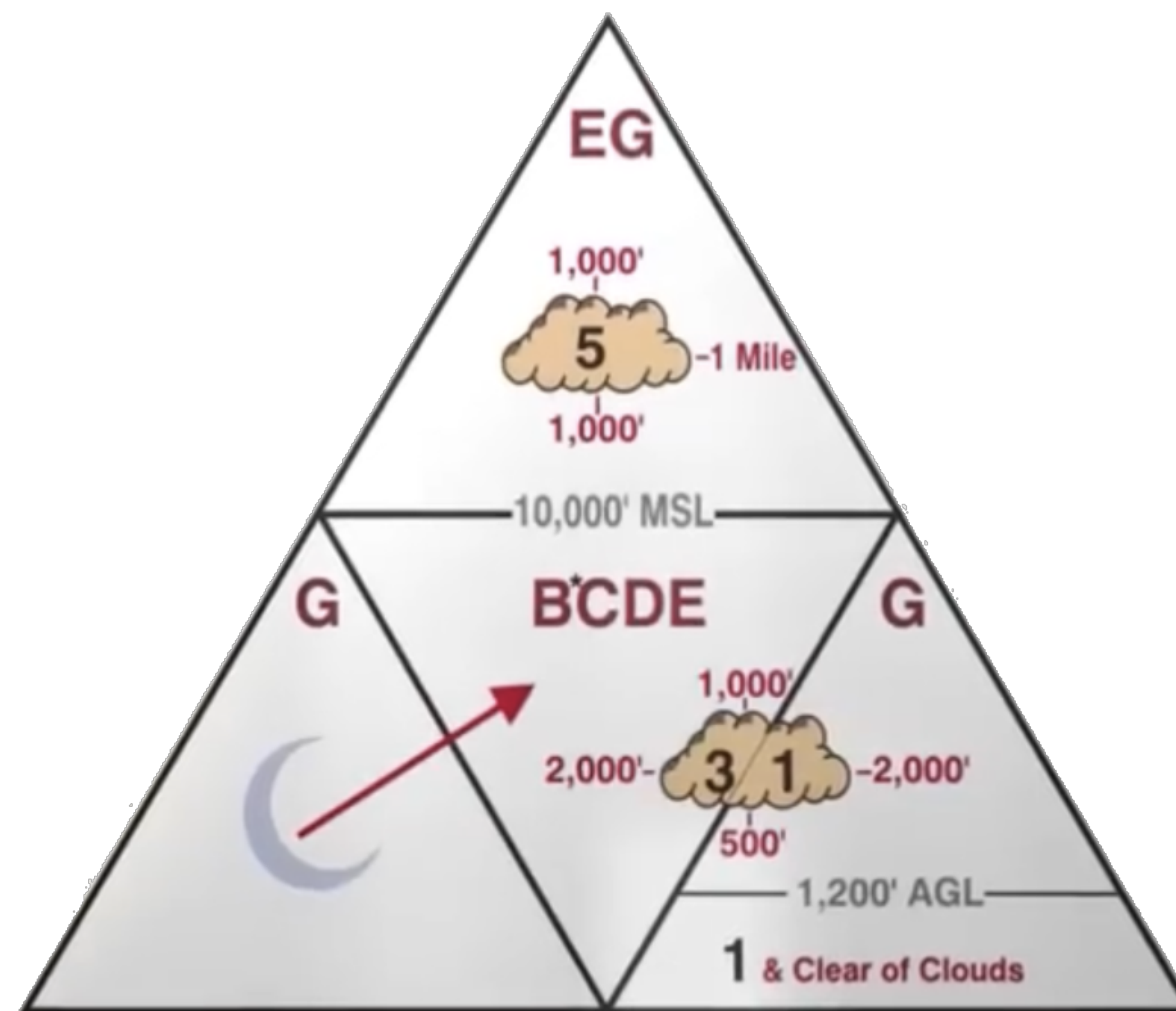


Weather Minimums

Rod Machado's hint for remembering airspace.

Class A is IFR only

Class B is Clear of Clouds





Weather Minimums

Airspace—Weather Minimums

Airspace	Flight visibility	Distance from clouds
Class A	N/A IFR Rules Apply	N/A IFR Rules Apply
Class B	3 statute miles	COC
Class C, Class D Class E ^{10,000⁻} , Class G ^{Night}	3 statute miles	<u>1,000'</u> 2,000' 500'
≥ 10,000' MSL Class E, Class G ^{1,200⁺}	5 statute miles	<u>1,000'</u> 1 mile 1,000'
Class G—more than 1,200 AGL and less than 10,000 MSL	1 statute mile	<u>1,000'</u> 2,000' 500'
Class G ≤ 1,200 AGL	1 statute mile	COC

Airport Operations—Weather Minimums

Airspace	Flight visibility	Ceiling
Class B, C, D, E surface area	3 statute miles	1,000'
Class G ^{1,200⁻} Night—within 1/2 mile of runway	1 statute mile	COC
Special VFR—Class B, C, D, E surface area and 10,000 ⁻	1 statute mile	COC
Special VFR at Night—Plane and pilot must be IFR rated	1 statute mile	COC



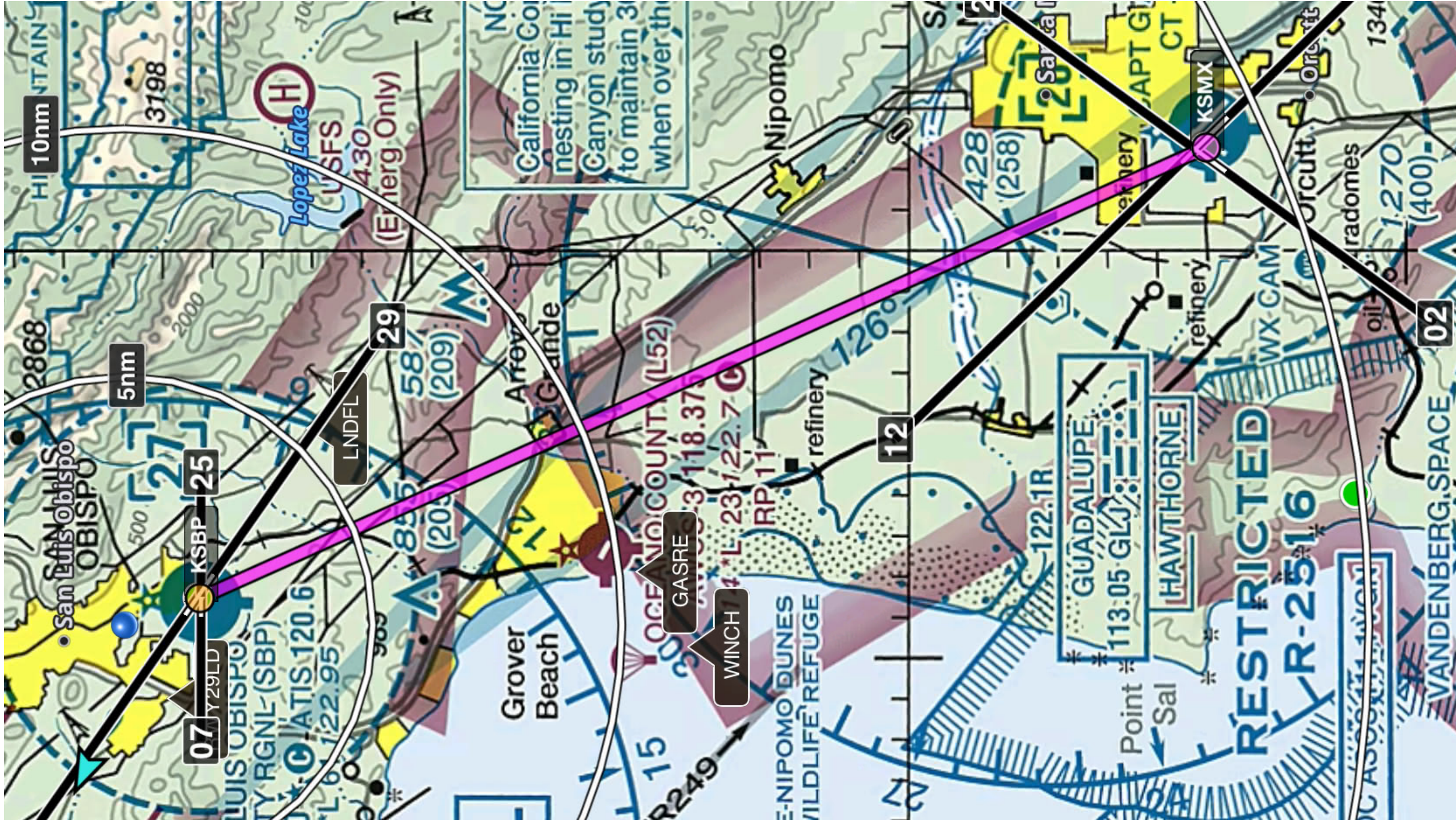
Weather—Within Boundaries of an Airport

§ 91.157 Special VFR weather minimums.

- (a) ...below 10,000 feet MSL within the airspace contained by the upward extension of the lateral boundaries of the **controlled** airspace designated to the surface for an airport.
- (b) Special VFR operations may only be conducted—
 - (1) With an ATC clearance;
 - (2) Clear of clouds;
- (c) No person may take off or land an aircraft (other than a helicopter) under special VFR—
 - (1) Unless **ground visibility is at least 1 statute mile**; or
 - (2) If ground visibility is not reported, unless flight visibility is at least 1 statute mile. For the purposes of this paragraph, the term flight visibility includes the visibility from the cockpit of an aircraft in takeoff position if:
 - (i) The flight is conducted under this part 91; and
 - (ii) The airport at which the aircraft is located is a satellite airport that does not have weather reporting capabilities.

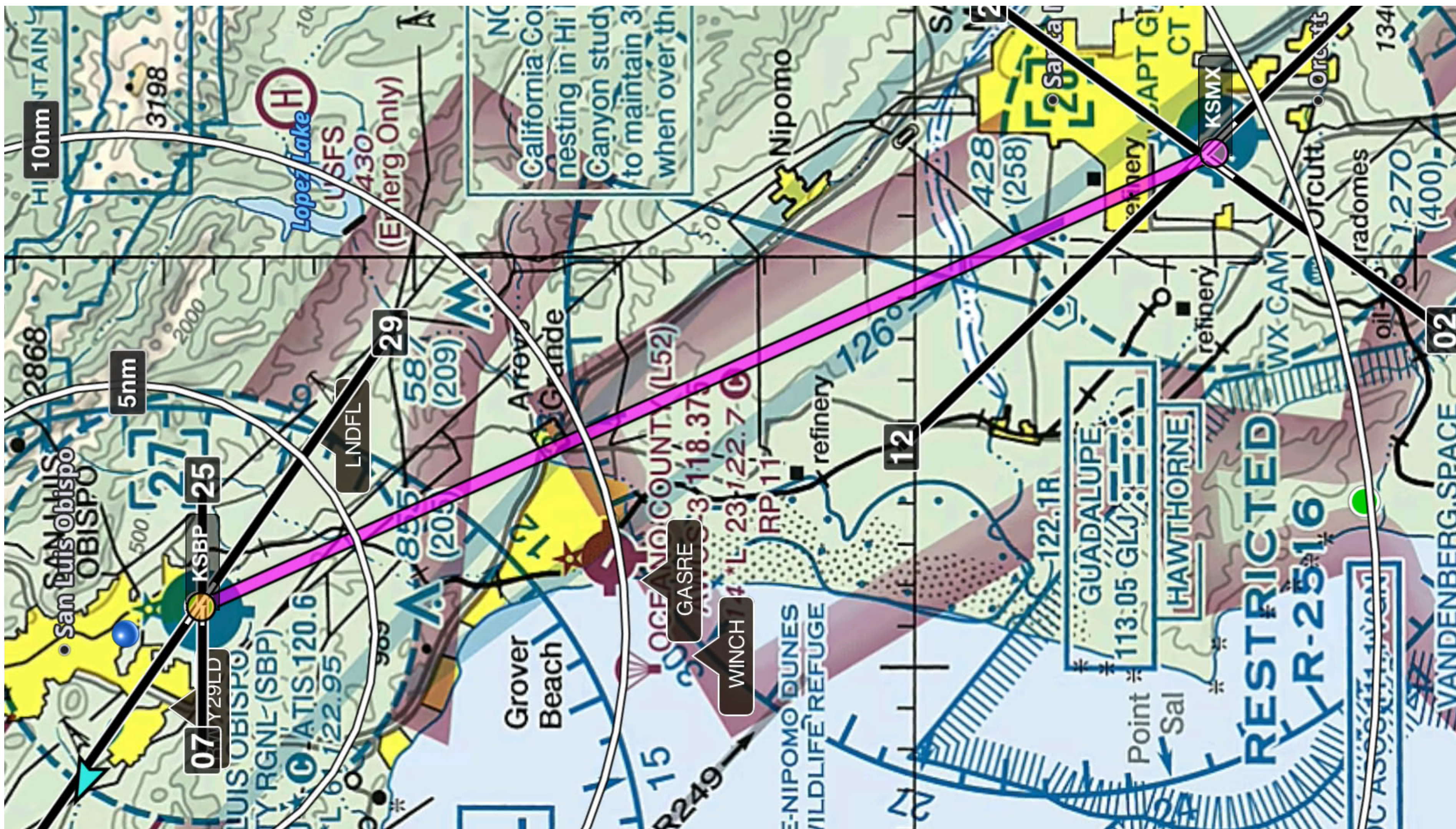
Special VFR

Can you fly Special VFR from KSBP to KSMX?



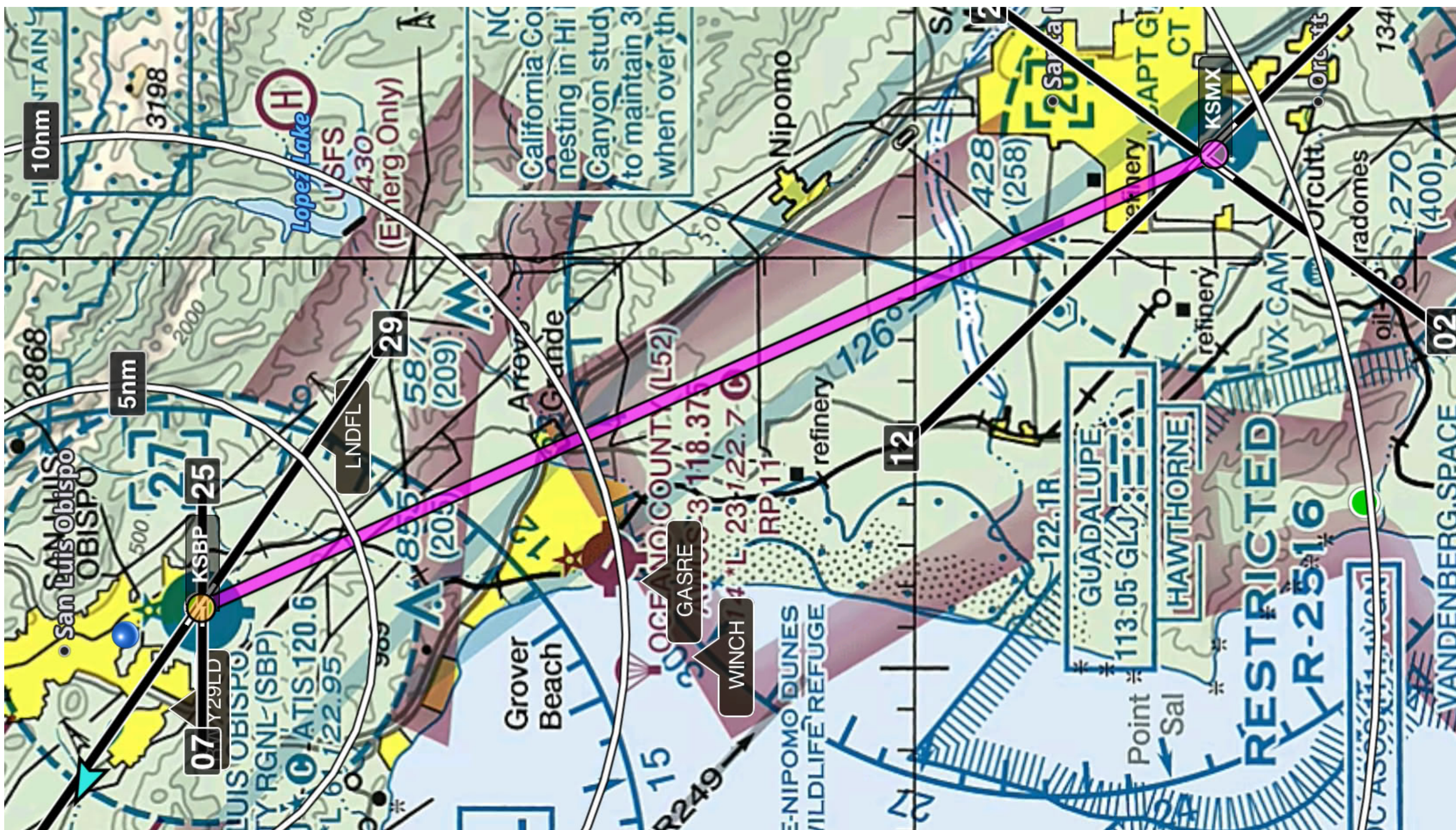
Airspace and Low Ceilings

Can you fly from KSBP to KSMX if the ceiling is 2,000' AGL?
What airspaces are you in? What altitude would you fly at?



Airspace and Low Ceilings

Is it uncongested? Above 700' is Class E with clearance from clouds 500' below and 3 miles vis.





Actual weather before a Young Eagles event

METAR for: KSBP (San Luis Obispo/San Luis Cnty, CA, US)

Text: METAR KSBP 151656Z VRB03KT 10SM OVC013 18/14 A3012 RMK AO2 SLP198 T01780144

Conditions at: 1656 UTC 15 Sat Aug 2026

Temperature: 64.0°F (17.8°C)

Dewpoint: 57.9°F (14.4°C) (RH 80%)

Altimeter: 30.12 inHg (1,020.10 hPa) (sea level pressure 1019.8 hPa)

Winds: variable at 3 kt (2 m/s, 3.5 mph)

Visibility: 10+ mi (16+ km)

Clouds: overcast at 1,300 ft

Ceiling: 1,300 ft

METAR for: KSMX (Santa Maria/Hancock Fld, CA, US)

Text: METAR KSMX 151651Z 00000KT 10SM OVC011 17/14 A3013 RMK AO2 SLP203 T01720144 \$

Conditions at: 1651 UTC 15 Sat Aug 2026

Temperature: 63.0°F (17.2°C)

Dewpoint: 57.9°F (14.4°C) (RH 84%)

Altimeter: 30.13 inHg (1,020.40 hPa) (sea level pressure 1020.3 hPa)

Winds: calm

Visibility: 10+ mi (16+ km)

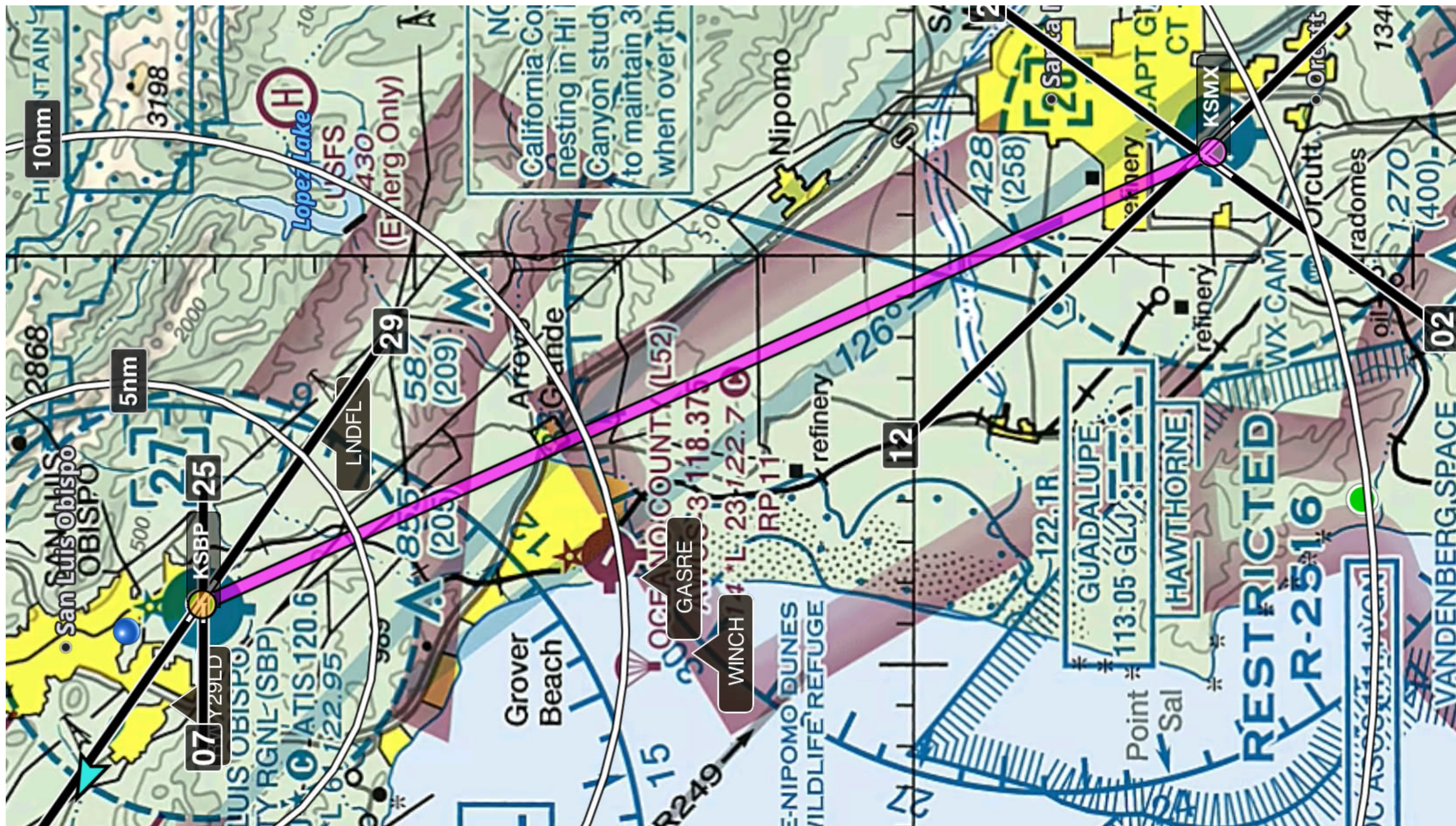
Clouds: overcast at 1,100 ft

Ceiling: 1,100 ft

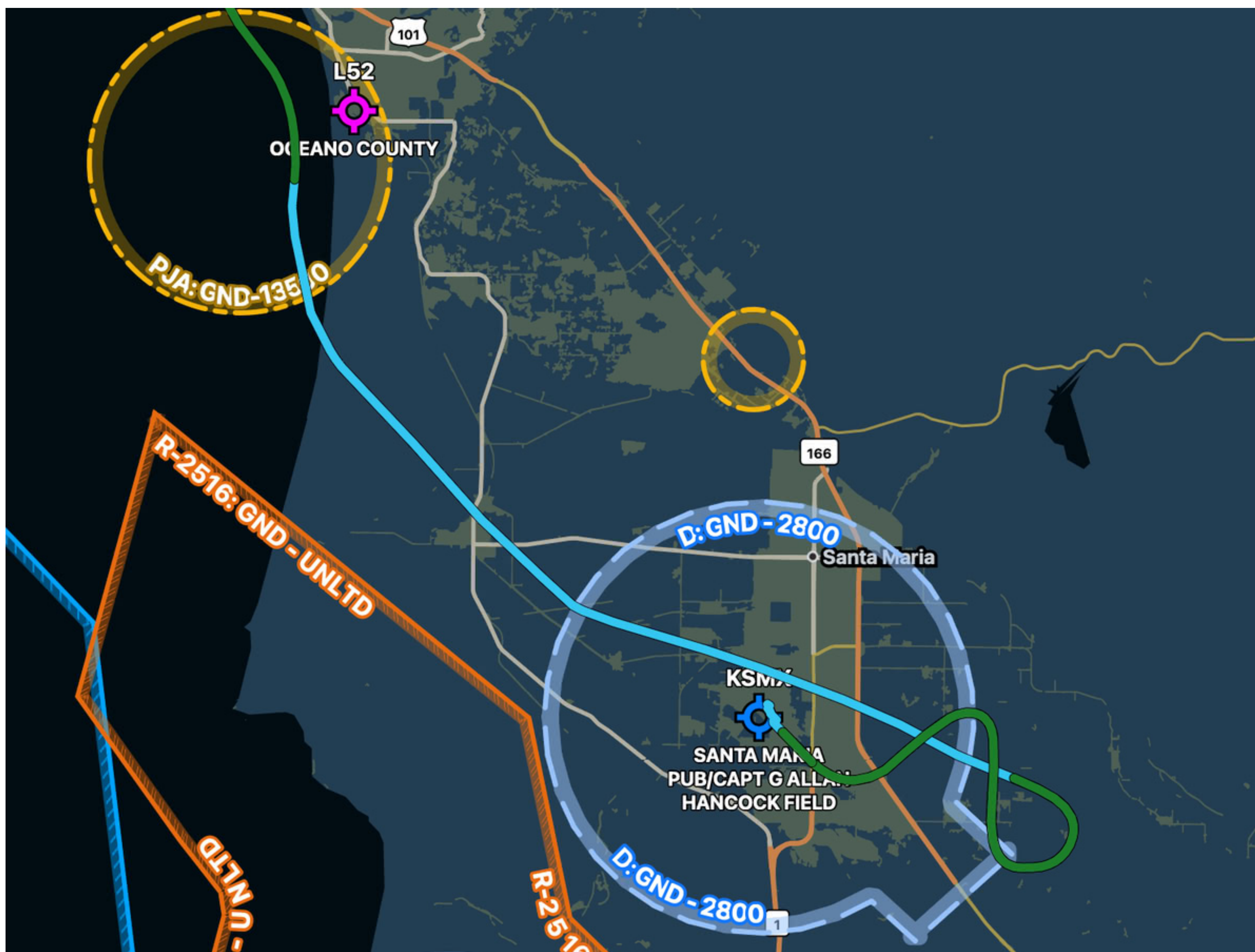
QC flag: SOME DATA ABOVE MAY BE INACCURATE!!!

Is it legal? Is it safe?

KSBP overcast 1,300' KSMX overcast 1,100'



What I chose to do.



Note: KSMX Tower was closed so the airfield was Class G.



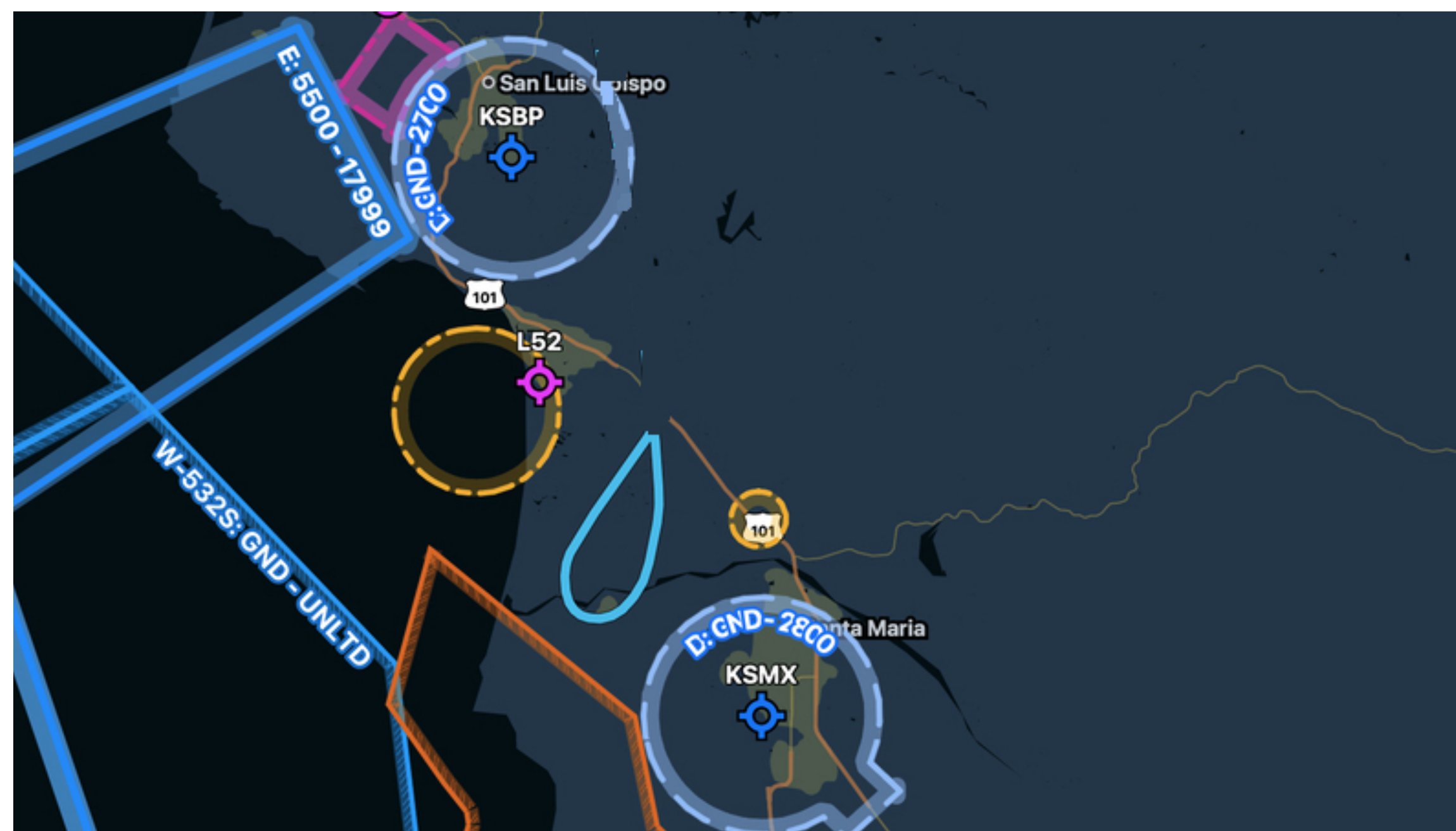
Real World Example

Returning at dusk from up north, after the tower was closed, with 40 gallons of fuel, weather in Paso is clear. The weather changed from broken at 1,500' AGL to broken at 1,000' AGL to overcast at 1,000' AGL, 10 miles visibility.

There was a huge hole as indicated in the picture below. Can you request a Special VFR to get into either airport?

Who would you ask for it?
Would your answer be different if it was daylight?

Could you land at Oceano?
WWYD?

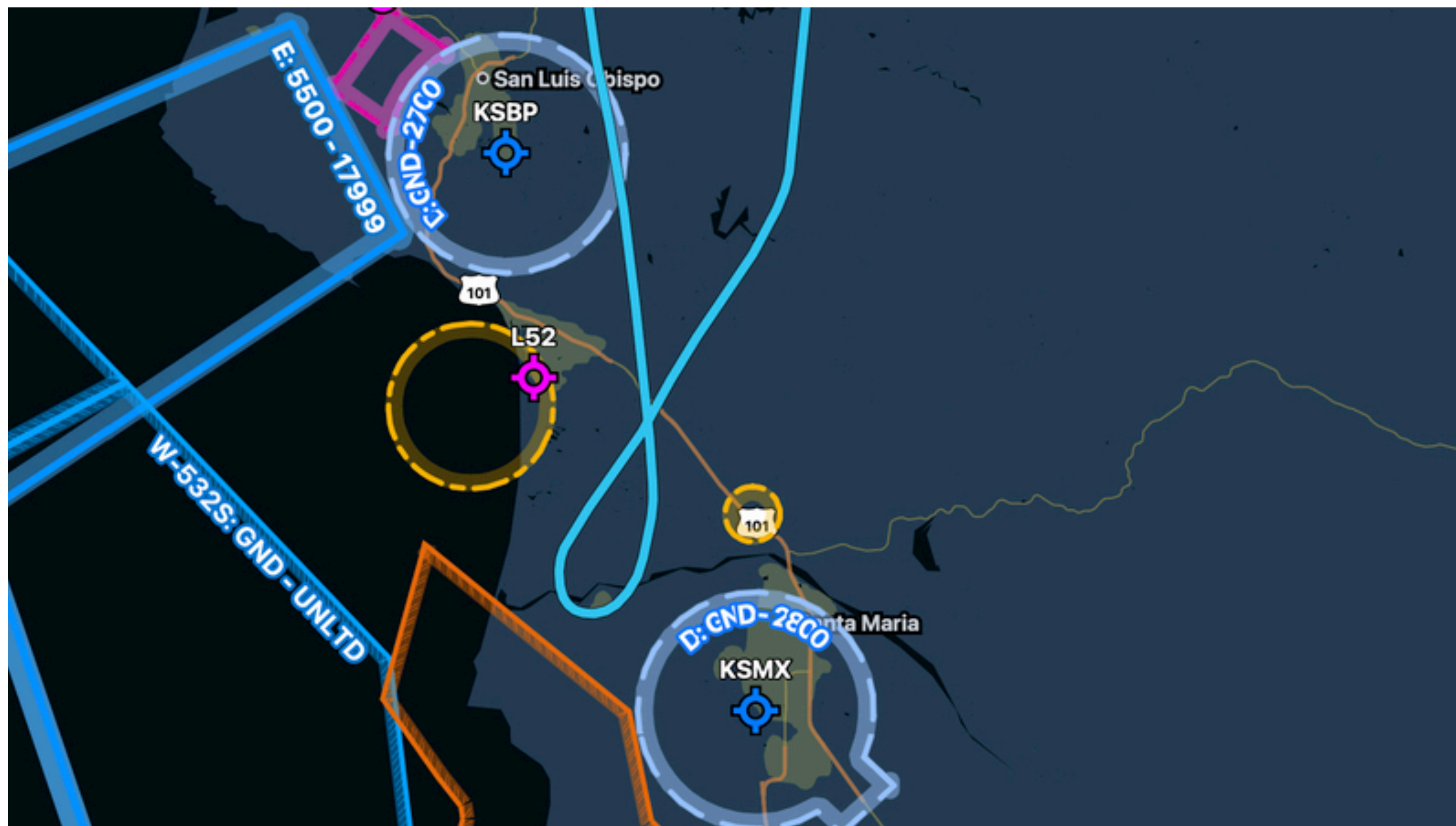




Special VFR

Someone last month gave me the answer:

If you have to debate with yourself what to do, the answer is always no.





Is there anything that we didn't cover that you think is important to discuss or that you have questions about?



Next VMC Club Meeting

September 17, 2026