



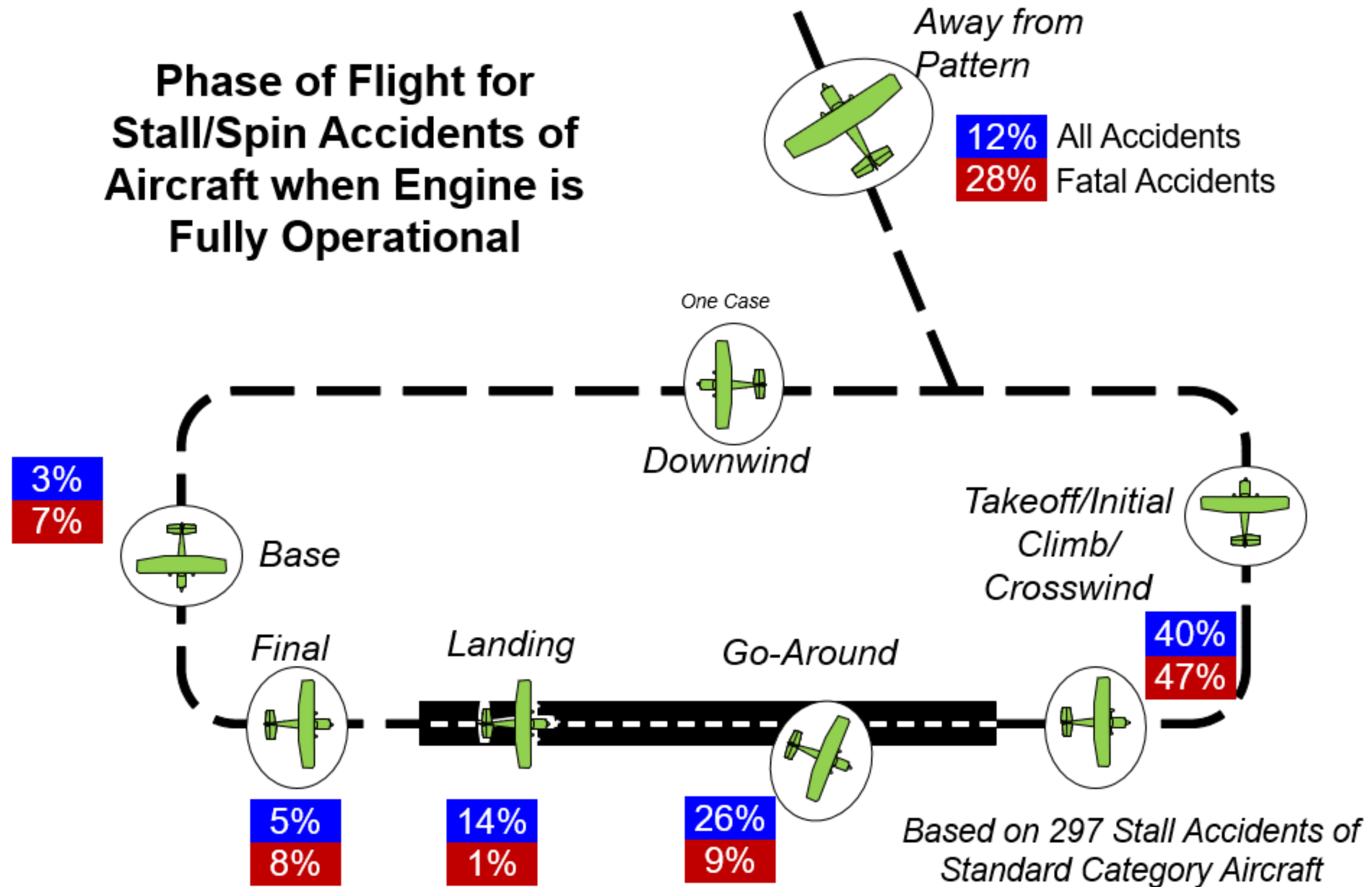
EAA 170 Meeting

San Luis Obispo
October 11, 2026

Notes are at
EAA170.TouringMachine.com



Stall/Spin Accidents in the Pattern



[Source:](#) Pilots of America, Ron Wanttaja



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

Hours per landing 0.8

Average Fight Time 1.2

About 20% of the time taking off or landing.

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.



Stabilized Approaches

- ☑ 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:
Persuade you to go around if your approach is not stabilized.



78 Accidents in 11 Days

78

ACCIDENT/INCIDENTS

JUNE 1–11

15

INJURIES

JUNE 1–11

2

FATALITIES

JUNE 1–11

~80%

TAKEOFF OR

LANDING

PHASE

51%

LANDING PHASE

SPECIFICALLY



Stabilized Approach

As you move through the round-out and into the flare, your scan needs to shift outside the cockpit. Peripheral vision is your best tool for alignment and pitch attitude at that point. **If the approach was stabilized, the airspeed will take care of itself.** Your attention needs to be on centerline control, aircraft alignment, and managing pitch—not hunting for numbers on the instrument panel.

[I would go further and say that if you are stabilized your eyes should be outside after you cross the threshold.]



Accidents That Closed The KSBP Airport

Pilot Error

- 2000-08 Flat tire when the instructor braked hard to make Taxiway Echo.
- 2007-07-18 The student pilot's **improper flare**, which resulted in a hard landing
- 2008-04-07 The pilot's **inadequate landing flare**, resulting in a hard landing
- 2009-03-17 The pilot's inadequate compensation for the **crosswinds** during touchdown
- 2013-09-16 The pilot's inadvertent action of retracting the landing gear instead of the flaps
- 2014-03-19 The pilot's inadequate **flare**, which resulted in a bounced landing and subsequent loss of aircraft control during landing
- 2015-01-03 The accidental application of the brakes by the passenger during landing roll
- 2018-07-08 The pilot's improper landing **flare**, which resulted in a hard landing
- 2023-05-02 The pilot's failure to maintain **directional control** during the landing roll
- 2024-05-17 The pilot's failure to maintain **directional control** during the landing roll
- 2025-05-23 The pilot's failure to maintain **directional control** during takeoff

Mechanical Failure

- 2014-03-07 Corrosion of the bulkhead assembly in the left main landing gearbox area, which resulted in the structural failure ... subsequent landing gear collapse.
- 2018-09-15 The failure of the landing gear extension motor due to wear, which resulted in the right main landing gear not fully extending
- 2026-09-13 Gear collapse on the runway.

I recall a few more that didn't result in an NTSB report but closed the runway for a short time.



Passenger Briefing

As PIC I am responsible for the safety of the passengers and the safe operation of the aircraft. Please keep your seatbelt tightly fastened at all times during the flight. The harness slides into the buckle and by pulling on the buckle you can release both. You can remove the shoulder restraints during the flight, but I don't recommend it. You can adjust your seat now, but do not adjust it during the flight, unless you ask first, because it can slide rapidly forward or backward. The door latches at the top. I'll make sure it is closed and locked before we take off. If there is an emergency and we need to leave the aircraft, push the latch forward and then pull up on the lever in the door to open it.

Do not leave the plane while the engine is running. Do not touch anything during the flight, especially do not grab the yoke to steady yourself if we encounter turbulence. Yours is connected to mine. The only thing in the front that you can touch is the air vent on the side of the door. If you are hot or starting to become airsick, turn it so that the outside air streams over your face. Look ahead at a point. Airsick bags are in the glove compartment. We are flying under Visual Flight Rules, which means that we are responsible for seeing and avoiding other aircraft. If you see a plane, please point it out to me using the hands of a clock as reference. We also get help in locating other aircraft and get instructions from ATC over the radio. If you hear talking on the radio, stop talking.



Quiz Time

Raise your hand if you fly airplanes.

Put your hand down if you mostly fly a retractable.

Put your hand down if you fly a constant speed prop.

Put your hand down if you take your seat belt off.

Leave your hand up if you don't have to switch tanks. Put your hand down if you never balance the fuel between tanks while enroute.

Leave your hand up if you use GUMPS or a variant.



GUMPS

~~G~~

Gas

~~U~~

Undercarriage

M

Mixture

~~P~~

Prop

~~S~~

Safety



GUMPS For Retracts

G Gear Down

U Undercarriage Down

M Make Sure Gear's Down

P Put the Gear Down

S Still Down?



Quiz

Does GUMPS make you a safer pilot?

a. Yes

b. No



Unstabilized Approach—Miami

Flight 7598 was cleared for landing on runway 30 from MIA airport traffic control tower (ATCT)/terminal radar approach control (TRACON) about 1349 EDT when the airplane was about 12 nautical miles from the runway 30 displaced threshold. According to Automatic Dependent Surveillance-Broadcast (ADS-B) Out and FDR data, flight 7598 was about **105 ft above ground level (agl) at a groundspeed of 177 kts as it crossed the threshold of runway 30.** The accident airplane **touched down about 3,750 ft** past the threshold at a groundspeed of 160 kts.

[Threshold crossing height is 50'; land in the first 1,000' at a speed of around 130 kts.]



Unstabilized Approach—Porterville

According to the pilot [of the Cessna 560XL], about 30 miles from the destination, the Los Angeles Air Route Traffic Control Center (artcc) controller cleared them to descend to 16,000 ft MSL. The controller then cleared them to descend to 9,000 ft MSL followed by a descent to 6,000 ft MSL. About 10 miles from PTV, they were about 5,000 ft MSL and 250 knots....On the visual straight in approach, the airplane was estimated to cross the runway threshold between **225-250 knots and floated about a third to halfway** down the [5,960 ft long] runway.

[Threshold crossing height is 50'; land in the first 1,000' at a speed of around 100–120 kts.]



Lancair Runway Overrun



https://youtu.be/xCSUCvev_bl



Would a GUMPS check have prevented any of these accidents?

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Go Around

Cram – Power In (Carb Heat, Prop, and Mixture too)

Climb – Nose on Horizon

Clean – Gear first, then flaps

Cool – Cowl Flaps

Course – Course or Runway heading

Communicate – Let the tower know your intentions

Have you ever had to or decided to go around?

When was the last time you practiced a go around?

Did you do everything correctly?



Quiz

Would a GUMPS check help in a go around?

a. Yes

b. No



Stabilized Approach for Jet Airplanes

The performance charts and the limitations contained in the FAA-approved AFM are predicated on momentum values that result from programmed speeds and weights. Runway length limitations assume an exact **50-foot threshold** height at an exact **speed of 1.3 times V_{so}** . That “window” is critical and is a prime reason for the stabilized approach.

Performance figures also assume that once through the target threshold window, the airplane touches down in a target **touchdown zone approximately 1,000 feet** down the runway, after which maximum stopping capability is used



Basic Elements to the Stabilized Approach

The airplane should be in the **landing configuration by 1,000 feet AGL** in the approach. The landing gear should be down, landing flaps selected, trim set, and fuel balanced. Ensuring that these tasks are completed helps keep the number of variables to a minimum during the final approach.

The airplane should be **on profile before descending below 1,000 feet**. Configuration, trim, speed, and glidepath should be at or near the optimum parameters early in the approach to avoid distractions and conflicts as the airplane nears the threshold window. An optimum glidepath angle of about 3° should be established and maintained.

Indicated **airspeed** should be between zero and 10 knots above the target airspeed **by 500 feet AGL**. There are strong relationships between trim, speed, and power in most jet airplanes, and it is important to stabilize the speed in order to minimize those other variables.

The optimum descent rate is dependent upon ground speed. Typical descent rates fall between 500 and 700 feet per minute.



Piper Arrow Pattern

Downwind	- 20" MP, Full RPM, and 100 Kts
Numbers	- 18" MP → 90 Kts
	Gear down
	1 Notch of Flaps - 10°
	~ 500 FPM ↓
Base	- 16" → 85 Kts
	2 Notches - 25°
Final	- 15" → 80 Kts
	3 Notches - 40°
Threshold	- 70 Kts
Flare	- Idle → 61 Kts

If the MP is way off from this something is wrong.

Is the gear down?

Flaps down?

Rather than figuring it out GO AROUND!



Cherokee Pattern

Downwind	- 1700 RPM and 100 MPH
Numbers	- 1500 RPM and 90 MPH 1 Notch of Flaps
Base	- 1500 RPM and 80 MPH 2 Notches
Final	- 1500 RPM and 70 MPH 3 Notches
Threshold	- Idle and 70 → 55 MPH

Do know the power and airspeed settings for your airplane to make a stabilized approach?



Top of the Descent

C-FARTS

Compass — Align the Heading Indicator with the compass

Fuel — Select the tank with the most fuel.

ATIS — Get the ATIS, set the altimeter

Runway — Plan the approach

TPA — Traffic Pattern Altitude

Safety — Seatbelts and Shoulder Harnesses



Entering the Pattern

At the Numbers or 2,000' AGL Straight In

Verify Runway

Altitude

Airspeed

Align with Centerline

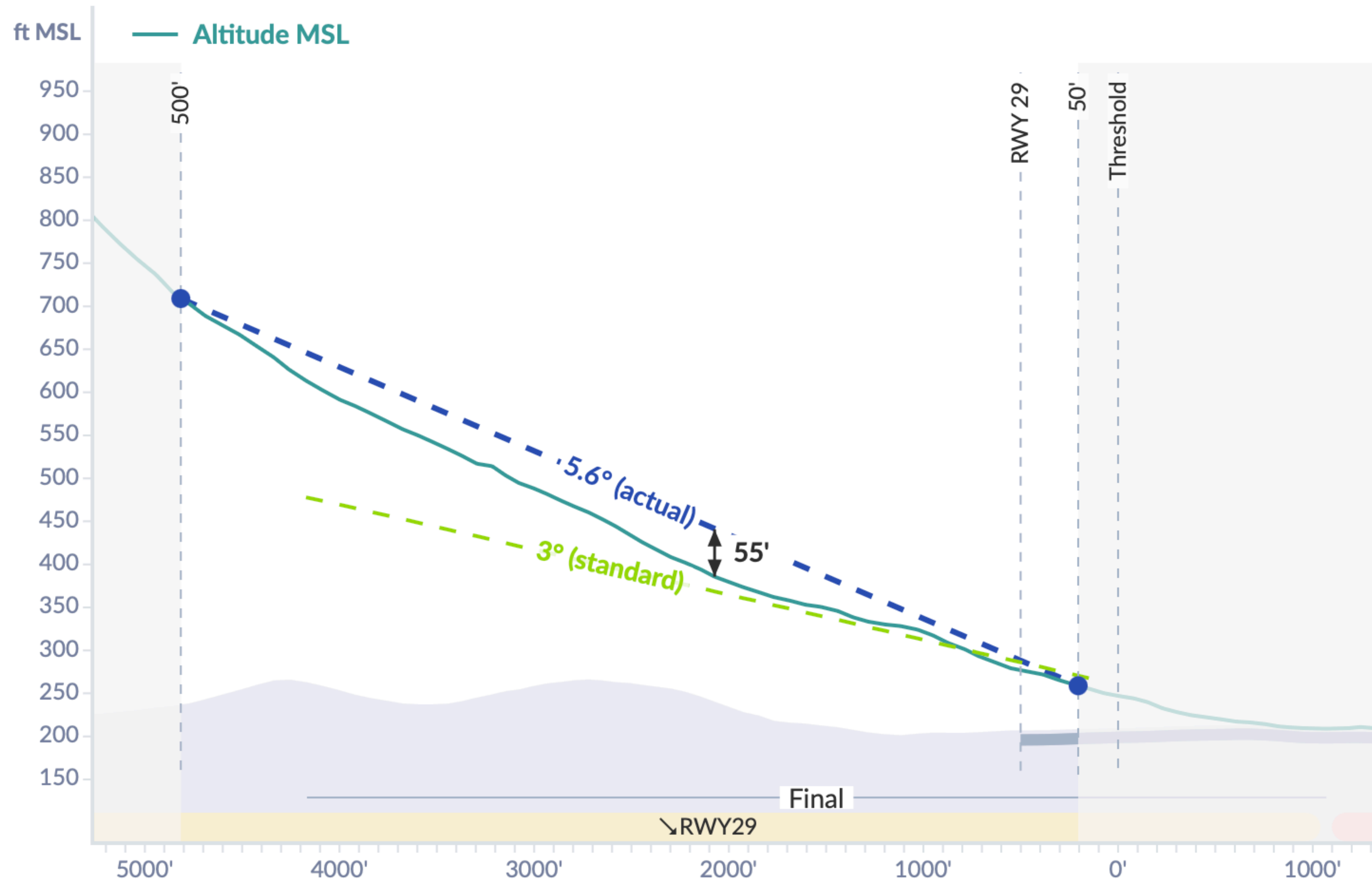
Gear Down

Scan for traffic

Repeat AAG at Base Turn, Final Turn, Short Final

RAAGS







ForeFlight Will Rate Your Flights

SEPTEMBER 2026

KSQL → KSBP

Sep 13, 2026 at 3:53 PM PDT
N1997H

96

AUGUST 2026

KSMX → KSBP

Aug 15, 2026 at 1:51 PM PDT
N1997H

98

KSMX → KSMX

Aug 15, 2026 at 1:12 PM PDT
N1997H

83

KSBP → KSMX

Aug 15, 2026 at 12:29 PM PDT
N1997H

97

KSBP → KSBP

Aug 11, 2026 at 3:29 PM PDT
N1997H

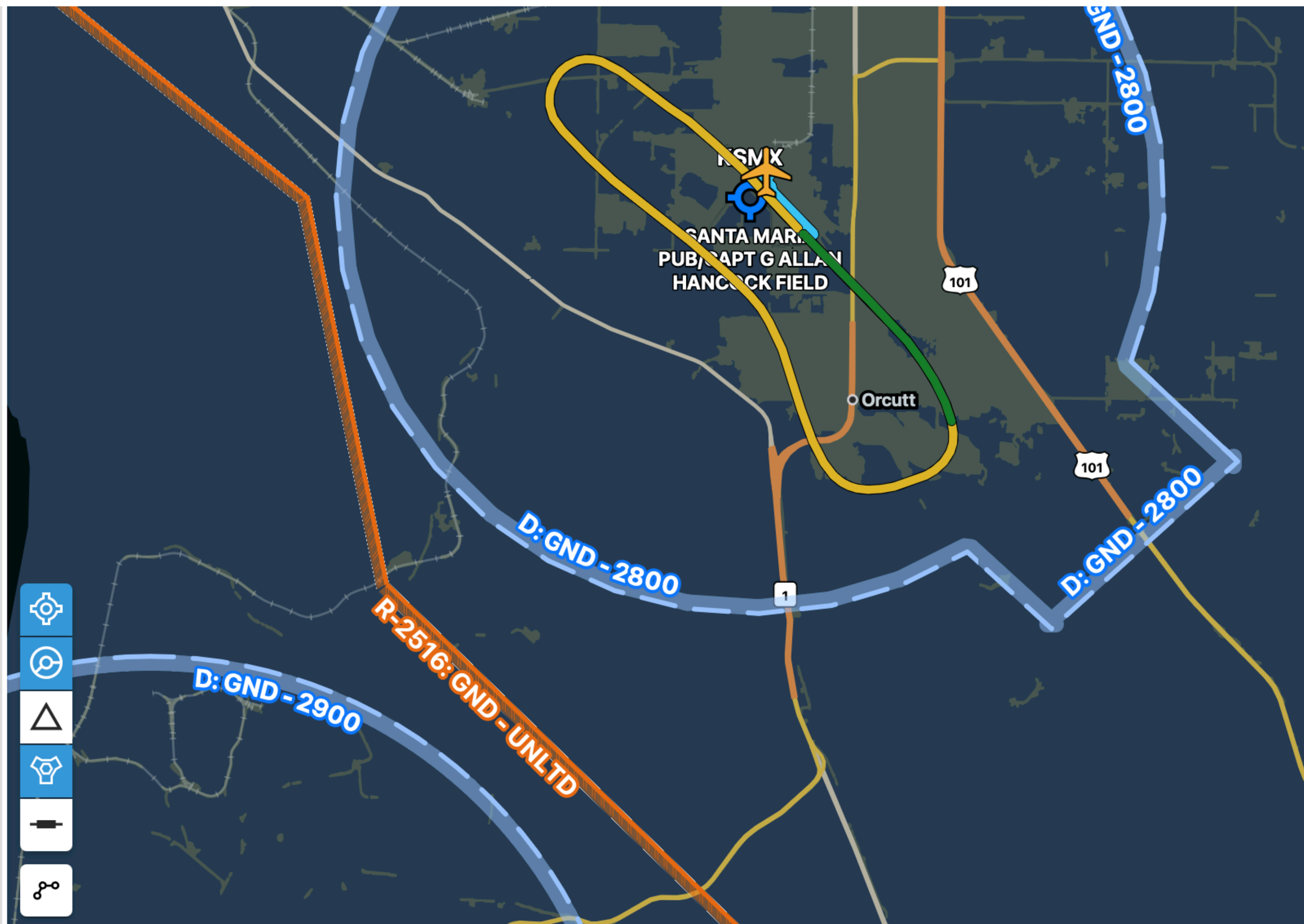
87

JULY 2026

35.60°N/120.67°W → KSBP

Jul 26, 2026 at 3:41 PM PDT
N1997H

99





Next

EAA 170 Meeting

Elizabeth's Induction to the
International Forest of Friendship

November 8, 2026