

Thomas P. Turner's Mastery of Flight®

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FLYING LESSONS for September 3, 2026

FLYING LESSONS uses recent mishap reports to consider what *might* have contributed to accidents, so you can make better decisions if you face similar circumstances. In most cases design characteristics of a specific airplane have little direct bearing on the possible causes of aircraft accidents—but knowing how your airplane's systems respond can make the difference in your success as the scenario unfolds. So apply these FLYING LESSONS to the specific airplane you fly. Verify all technical information before applying it to your aircraft or operation, with manufacturers' data and recommendations taking precedence. **You are pilot in command and are ultimately responsible for the decisions you make.**

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This week's LESSONS

This week's LESSONS are inspired by an actual instrument flight scenario that ended with eight fatalities. But the LESSONS may also apply to VFR pilots dealing with marginal weather conditions, or any pilot choosing how to deal with storms, turbulence, ice or crosswinds. Read on.

The information so far is unofficial. The [Aviation Safety Network](#) reports:

A Security Aviation Cessna 441 Conquest II, N128EZ, crashed near Cape Newenham Airport (EHM), Alaska. There are believed to be no survivors among the eight occupants.

The airport is located at the Cape Newenham Long Range Radar Site. The flight had been chartered by the US Army Corps of Engineers. The NTSB stated **the aircraft crashed during the second missed approach** to runway 15.

ADS-B data indicates that the flight departed Anchorage (ANC) at 09:12 local time (17:12 UTC) with destination EMH. At 10:44 (18:44 UTC) the flight entered a holding to the east of EMH. Visibility at the airport at the time was poor: **400 m with a ceiling at 200 feet.**

About 11:05 (19:05 UTC) the flight commenced the approach to EMH. The local METAR showed a **3 mile visibility and broken clouds at 300 ft.** Flightaware ADS-B data stops at 11:11, north of EMH, and resumes at 11:36 to the north-east [sic] of EMH. The final datapoint was recorded at 11:45 close to the airport. Weather recorded at 11:49 show a 400 m visibility [sic] in fog with a 300 ft overcast.

See <https://aviation-safety.net/wikibase/577225>

400 meters is a little less than ¼ statute mile. Later news reports confirm all eight persons aboard the Conquest perished in the crash.

The Cape Newenham airport ([PAEH](#)), elevation 531 feet above sea level, is a U.S. military airfield in southwestern Alaska near the shores of the Bering Sea. PAEH supports a [USAF radar site](#) and has a single, 3945-foot long gravel runway. The airfield has two approaches, both to Runway 15: [RNAV \(GPS\) 15](#) and [NDB DME 15](#). The chart states the approaches are “not for civil use. Military certified aircrews or authorized contract aircraft only.”

See:

<https://www.aopa.org/destinations/airports/EHM/details#procedures>
https://en.wikipedia.org/wiki/Cape_Newenham_Long_Range_Radar_Site
https://www.aopa.org/ustprocs/20260806/AK-1/ehm_rnav_gps_rwy_15.pdf
https://www.aopa.org/ustprocs/20260903/AK-1/ehm_ndb_dme_rwy_15.pdf

Minimums for the **GPS** approach—an LNAV with no electronic glidepath—are **800 feet ceiling and 3 statute miles visibility**. **Minimums** for the **NDB** approach are slightly lower: **800 feet**

ceiling and 2 ½ statute miles visibility. Reported weather was well below minimums for either approach for several hours including the time of the accident.

Circling is not authorized for either approach. Prominent notes on the chart state:

- Rwy located on the slope of a 2306' [foot] mountain. High terrain both sides and S end of runway.
- Successful go-around improbable if initiated beyond the MAP [Missed Approach Point].

The missed approach procedure for the NDB 15 is a climbing right turn to 4500 feet over water while intercepting a bearing off the nondirectional beacon, to go 14 miles northeast of the airport to enter a hold. The missed for the RNAV (GPS) 15 is to turn right over the Bering Sea while climbing to 3500 feet to a fix northwest of the airport to hold. [The FlightAware track](#) shows the pilot was flying **the RNAV (GPS) 15 approach**, holding for about 20 minutes (typically five times around the hold) at the approach's eastern Initial Approach Fix. The track descended below radar (ironically, given its destination) shortly after turning inbound on the final approach course.

See <https://www.flightaware.com/live/flight/SVX45/history/20260820/1715Z/PANC/PAEH>

The first missed approach and the second attempted missed approach are not on the FlightAware record. Only [part of the second approach is on FlightAware](#), from inside the holding fix to going off radar at about the same point as on the first approach.

See: <https://www.flightaware.com/live/flight/SVX45/history/20260820/1936Z/PANC/PAEH>

Commercial aircraft including 14 CFR 135 operators are not permitted to begin an instrument approach unless an official weather observation reports conditions at or above minimums. The word “charter” in unofficial accounts implies Part 135 but may not be precisely the nature of the Army contract flight. The rules for charter operators may be different in Alaska, too—some air safety regulations are different in the 49th state, and the Alaskan accident record often reflects it.

Government flights and private operators are not bound by this approach requirement. Their pilots are permitted to “take a look” by flying the approach procedure. If landing criteria are not met—runway or runway environment in sight—by the time the flight reaches the missed approach point the pilot must immediately execute the missed approach procedure.

As long as the pilot flies the procedure as precisely published, not descending below charted altitudes and immediately flying a missed approach when required, “taking a look” is safe. It's when the pilot chooses to go “just a little lower” or “just a little further” to try to visually acquire the runway in poor conditions, or when stress or fatigue contributes to imprecise aircraft control, that pilots (and their passengers) pay the price.

Historically these stresses seem to accumulate when a pilot exhibits a strong desire to complete the approach. This is often indicated by a second (or, I've seen, a third, fourth or even fifth) attempt at the same approach. Pressure can get even worse if the pilot hangs around the destination airport long enough that he or she burns through so much fuel that there's not enough left to divert to somewhere with better weather. Human factors conspire and multiply against the pilot hell-bent on getting to the intended destination.

Two mitigations help protect pilots. **First**, whether by regulation for air carriers or voluntarily for the rest, follow the Part 135 guidance of not beginning an approach unless the weather is reported to be good enough to provide a chance of landing out of a by-the-book approach.

Second, if you try an approach and have to miss, don't waste fuel and increase your susceptibility to self-imposed pressure by trying the approach again unless one of three conditions exist:

1. You have **an objective reason** to expect that **the weather** conditions that required you to miss were temporary and that they **will improve** in time for your second attempt. This means **a weather update** from the ground—**hope is not a risk management strategy**. Don't accept a report that another pilot "got in." That other pilot may have busted minimums and just got lucky. **Make your own luck** by using objective data.
2. You can identify a specific technique or part of the procedure **you flew incorrectly** that caused you to miss, and which you can honestly say **you'll get right the next time**. You may not have been completely configured the first time and were *behind the airplane* for the entire approach. You may not have set up the avionics correctly and now fixed your error. This time you will be certain to be set up, in configuration and on speed before the fix.
3. You're facing **a true emergency** and because of equipment failure, unforeseen weather conditions or your own poor planning you have **no better options** within your remaining range. You **must** try again before you run out of fuel—**a truly dire scenario**. If you truly have no other options you may have to give it a shot. **You may well die trying**, taking your passengers with you. It's far better to monitor fuel and systems closely and divert before you force yourself into this almost-no-win scenario, and not find yourself in an emergency of your own making.

If condition 1 or 2 objectively exists then you might try the approach (or crosswind, or turbulence encounter) one more time. If not, **don't waste your fuel**, increase your stress, or tempt yourself to go a little lower or a little farther by trying again. If a justified second attempt doesn't work don't hesitate. Go somewhere else while you still have the gas to do so.

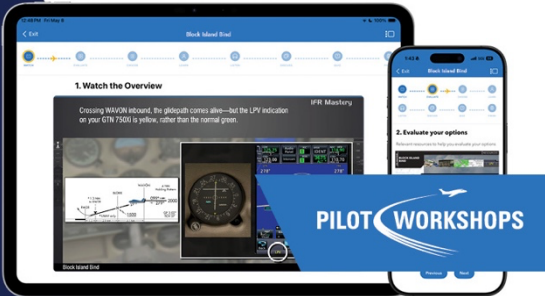
Takeoffs are optional, but landings are mandatory. What's **not** required is landing at the place you planned before choosing to take off. Keep your options open, and use them.

Questions? Comments? Supportable opinions? Let us know at mastery.flight.training@cox.net.

What would you do?

The glidepath disappears on an RNAV LPV approach. Would you continue to LNAV minimums? Test your knowledge in this IFR Mastery scenario.

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https://courses.sportys.com/training/portal/pilot-workshop/IFR/scenarios/block-island-bind/overview?utm_source=flyinglessons&utm_medium=emailbanner&utm_campaign=tuner26

Debrief

Readers write about recent *LESSONS*:

Reader, aerospace engineer, and my high school classmate Paul Siegmund writes about [last week's Debrief](#):

Tom, I loved the discourse among pilots who anticipate and think about how to mitigate loss of GPS. But one of the common themes caught my attention and I'd like to add a coda with more thoughts about it.

Except in the improbable event of a failure of a receiver, or moisture intrusion into an antenna that one Debrief mentioned, **redundant or spare GPS receivers are NOT the answer**, folks. If interference from friendly or unfriendly actors, or solar flares, or even industrial accidents wreaks havoc with one receiver at your location then it most likely will affect all the others with you as well. **If you know that an installed one has gone sketchy, don't rely on the others**. Portable or

consumer units, even those from aviation stores, are probably the most susceptible plus they are not required to alert that they have a problem (if they even know that they do.)

The point is that **you need to be fluent in navigation without GPS**. That is harder and less flexible, generally. But you need to know it. You were trained. You should be equipped. Now go practice. Some of the Debriefers nailed that point. All, please give this thought.

There's not much I can add to that, Paul. Thank you.

See <https://thomaspturner.com/flying-lessons-weekly/flying-lessons-for-august-27-2026/>

Reader Mike Morrow adds:

In response to the anonymous reader's comments, I think it's important to point out that any **ADS-B position data is meaningless without a valid GPS signal**. If there was GPS interference in the area, then the ADS-B data would also report an invalid GPS position, so that can't be used to infer where the aircraft was and what the pilots were doing.

Good point, Mike. Thank you too.

Reader Mike Blackburn continues the *LESSONS* from [last week's Debrief](#):

Once again, thank you for the informative newsletter which is a highlight of my week. WRT the **Go-Arounds are Awesome**... We have got into the habit of saying aloud as we enter the airfield airspace positioning for the approach ***"I do NOT NEED to land off this approach. A Go Around is a SAFE, and VALID option"***

I find this at least **validates** that the **go-around is an option** and that **brings it front of mind**. Merely ANOTHER tool to reinforce go-around discipline.

Thank you as well, Mike.

See www.goaroundsareawesome.com

Several readers wrote about touch and go technique discussed in the [August 20 Mastery of Flight®](#) report, including this from retired TWA Director of Safety and still-active airplane and sailplane instructor Wally Moran:

During my time as an airline instructor in the 70's, we did touch-and-goes in all the airline models. This was before simulators were good enough to teach landings. But we had long runways and a flight engineer to back up the pilots.

Today, for the reasons stated in your article, **I do not do touch-and-goes in any retractable-gear airplane**. So far, I have not had an unplanned gear retraction.

Reader John Majane adds:

Concerning touch and goes, or go-arounds for that matter, you touched on one important thing: **Do not climb until you have speed**. In my Bonanza, like you, absolutely no touch and goes. **I do not touch anything other than brakes and throttle until I am past the runway line and then I stop the plane and look at the things** (flaps, trim and possibly the mixture) along with changing frequency after the plane is stopped. With other planes doing either touch and goes or go arounds I go **full power**, keep **level to accelerate**, **reduce flaps** then **pitch up** as I am **cleaning up**. If there is an obstacle I aim for the top of the obstacle as that gives the shallowest climb gradient. Once in the correct configuration and at speed then Vx or Vy.

As a footnote the only RG I would do touch and goes in is the Arrow since the flap lever is on the floor and away from the panel.

From reader Brad Wolansky:

No touch and goes. While it took three different schools before I was happy with my multi schooling, at least none of them wanted to do T&G in a multiengine retract. I haven't done a T&G since I transitioned from my Skylane to my Seneca. And don't miss them. **Too rushed, too close to the ground, too much chance for error.**

Thank you all, and everyone else who sent similar comments. I make no secret about my recommendation against touch and goes in retractable gear airplanes, as well as in airplanes in which the typical landing pitch trim position is significantly different from the safe takeoff range. T&G hazards are not limited to these airplanes either, as evidenced by the [NTSB Final Report on a Cessna 150 touch-and-go crash](#) that began this discussion. In all cases there is, as Brad put it, **too much chance for error**.

See:

<https://thomaspturner.com/flying-lessons-weekly/flying-lessons-for-august-20-2026/>
<https://thomaspturner.com/wp-content/uploads/2026/08/2026.0510-A150-AZ.pdf>

There is, though, the nagging question of a go-around initiated after initial contact with the runway. **How do we train for that?** It's basically a touch and go. If you're flying one of those airplanes with retractable landing gear and/or typical landing center of gravity positions that result in significant UP trim in a normal (or short field) landing, John Majane's technique is your best bet: apply **power**, fly in a very shallow climb or even level as **speed** builds, firmly applying **control force** and changing **trim** as needed to make that happen. Retract **flaps** as recommended by the Go-around/Balked Landing checklist in the manual for the airplane you're flying. Before you run out of clear space over the runway but after you're on speed and in the proper flap position, begin a **climb**. If you're in a retractable gear airplane, retract the **landing gear only after confirming speed and a positive rate** of climb.

You can practice this by carefully flying go-arounds from the landing configuration just before you touch down. I suggest you do it with a knowledgeable instructor first, then practice the technique regularly to keep it fresh.

I recall many years ago being asked by a provider of *ab initio* airline training using Beech A36 Bonanzas as the primary trainer. Like many in the early stages of instruction, the provider included touch and goes in its syllabus, even with pre-solo students. **I suggested avoiding the maneuver.** But since they persisted I made **a follow-on suggestion** that touch and goes be limited to **dual instruction only** (not to be flown by solo students), and then only after careful **briefing and division of responsibilities**.

The mixture and propeller would be set to their climb positions on or before final approach. This gave the student pilot single-lever power control for a go-around—just the throttle. In a touch and go **the student managed pitch, trim and power but touched nothing else**. The **instructor was responsible for managing flaps and landing gear**, and of course monitoring the student for his/her actions. That seemed to work and in over 20 years of instruction by that particular program before they retired their then very high-time A36s I don't recall any reports of gear collapse or loss of control from pitch-up in a touch and go from that company. SOPs work.

The real *LESSON* from the [August 20 Mastery of Flight®](#) theme "Combining Checklists" is that, despite the overwhelming use of touch-and-goes as a training technique especially during early training with very inexperienced student pilots, **none of the Pilot's Operating Handbooks or Airplane Flight Manuals** I've seen even for the most common training aircraft **include a checklist or any guidance for flying a touch-and-go maneuver**. If you're going to fly or teach touch and goes—and it's going to happen despite the risks—**you must figure out precisely how you'll do it** using the systems and within the limitations of the airplane you're flying. As I wrote [August 20th](#), this means carefully adapting a combination of the Before Landing and the Balked Landing/Go Around checklists.

Thanks, everyone, for your insights!

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NEW THIS WEEK: David Peterson, Ron Koyich



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