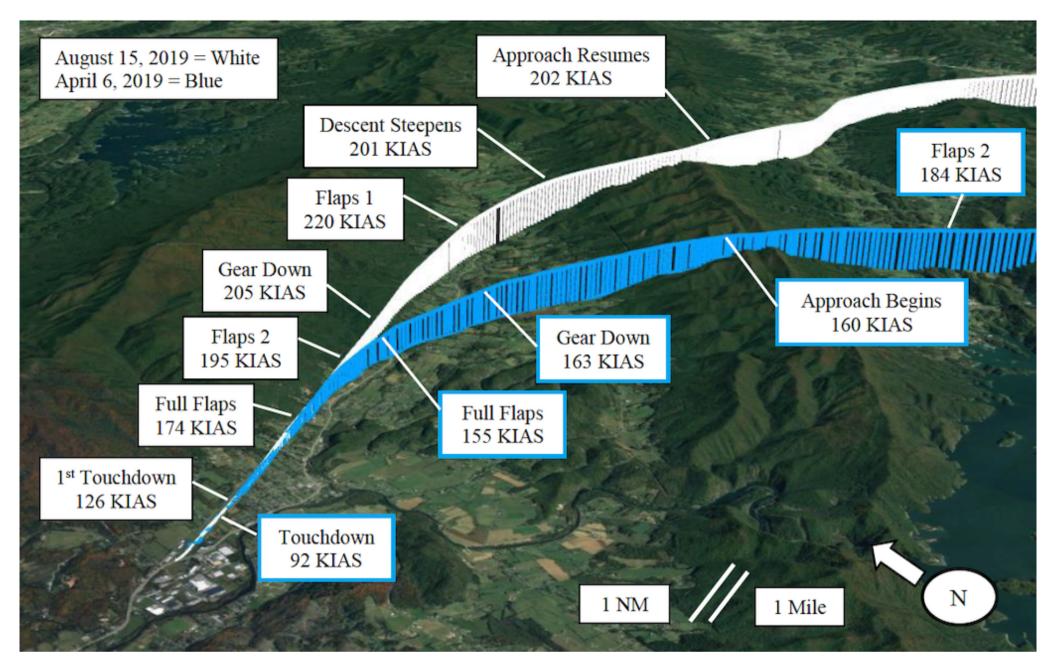
Three Steps to Stabilized Approaches, Part 2

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A comparison of stable (blue) and unstable (white) approach into Elizabethton Municipal Airport, Tennessee. Credit: NTSB

In Part 1, we began our discussion of why pilots fail to go around from unstable approaches when their SOPs tell them to.

More reasons why pilots fail to follow Standard Operating Procedures (SOP) for unstable approaches:

(3) SOP credibility. I think this type of pilot-versus-pilot pressure is rare, thankfully. I believe the primary reason behind the failure of most pilots to go around from unstable approaches is that we don't really believe the stable approach rules are credible.

When I failed to go around because I was still in a bank rolling out on final, I knew I would be completely stable at 400 ft., 100 ft. below our company's stabilized approach height criteria. Guilty? Yes. But something inside me justified my actions because that inner voice told me I could. One dot high on glidepath during an instrument approach at 1,000 ft.? Been there. But I had the glideslope needle centered shortly

thereafter. I am not alone in this, and when I am in the right seat I do speak up.

But I also understand the pilot flying (PF) will almost always take care of it. In the last five years I've only had to say "go around" for an unstable approach once. The PF had such an excessive descent rate going I was certain it could not be salvaged. As the flight department manager, I signed off on our SOPs and each of our pilots agreed to them. But we have failed to live up to them.

(4) Target fixation. We pilots tend to have "can do" personalities and despite our best intentions, there are times our goals can blind us to the dangers we face. Here again, we in business aviation have added challenges. Our destinations are quite often new to us. The process of landing is complicated by the task of having to find an unfamiliar airport.

On Aug. 15, 2019, a crew flying a Cessna Citation Latitude crashed at Elizabethton Municipal Airport (OA9), Tennessee, following an approach that included flight at the maximum allowed gear and flap speeds, descent rates of 1,500 fpm and a touchdown that was 18 kt. too fast. At one point, the PF/SIC asked the PM/PIC, "Do I need to go around?" The PM/PIC's answer was, "No." It is clear from videos of the aftermath that the occupants were lucky to have survived.

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During a post-accident interview, the PM/PIC was asked if he thought the approach was stabilized; he said no. It appears that when consumed by the task of approach and landing, pilots can fixate on the goal at the expense of SOPs. We "lock" onto our target until getting to the target.

Not Prepared To Go Around



Southwest Airlines Flight 1455, Burbank, California, March 5, 2000. Credit: NTSB

(5) Not prepared to go around when the time comes: A final issue that seems to vex us in the heat of the moment is that we are not mentally prepared to switch from "I am landing an airplane" mode to "I am going around" mode. The mental horsepower needed to fly an approach to landing is obviously considerable, even on a low-pressure, routine flight. If things become tense, switching from "I am landing" to "I am going around" suddenly can be almost impossible if we don't prepare ourselves for the possibility.

On March 5, 2000, a crew flying a Southwest Airlines Boeing 737 to Burbank Airport (KBUR), California, was set up by air traffic control with the proverbial "slam dunk" approach. They were held up high and asked to keep a higher-than-normal speed until late in the approach.

Despite very robust stabilized approach SOPs, the crew fixated on the task at hand and never considered going around. The first officer remembers hearing the ground proximity warning system "SINK RATE" and "PULL UP" calls but believed the captain was correcting. The airplane touched down at 182 kt. after consuming 3,000 ft. of runway in the flare. While all on board survived, the aircraft was destroyed.

The Solution That Has Gone Unnoticed (By Many)

Most of us pilots do not view our current stabilized approach criteria as credible. We think we can save approaches that are unstable as judged by these criteria. And we are not mentally prepared to go around from unstable approaches by the time the need becomes apparent. But perhaps even more alarming than all of that, many of us seem resigned to this state of affairs.

I was resigned to the way we've always done it too, until my eyes were opened during a talk given at the 2021 NBAA Business Aviation Convention & Exhibition. Charlie Precourt, retired space shuttle pilot and current Citation Jet Pilots Association Safety Committee chairman, outlined the problem and unveiled a solution that seemed to reinvent the idea of how to evaluate a stabilized approach. I told him it was the solution I had been looking for all these years.

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Precourt modestly told me it had all been laid out by the <u>2017 Flight Safety Foundation "Go-Around Decision-Making and Execution Project."</u> I read that report years ago but apparently tuned it out as just another explanation of the same old solution. However, Precourt's dynamic presentation gave life to the 54-page report and will forever change the way I fly airplanes. He cautioned me that the method should be tailored to aircraft type.

I've done that for my Gulfstream GVII, but I believe this method should work for any business jet. I think it will also work for smaller and larger aircraft, but I encourage you to read the report for yourself.

In Part 3, we'll discuss the three steps suggested by the Flight Safety Foundation report.

Three Steps To Stabilized Approaches, Part 1: <u>https://aviationweek.com/business-aviation/safety-ops-regulation/three-...</u>

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