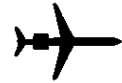


Attitude

by Jerry E. Tobias



Two types of attitude are critical to aviation safety. Aircraft attitude control (pitch, roll and yaw), of course, is always important. Whether you are visually “parking” the nose cowling of a 172 at the right spot on the horizon to establish the correct climb speed or hand-flying a Boeing to ILS minimums, maintaining the correct aircraft attitude for the situation is essential for a successful outcome. In many situations, though, aircraft attitude control is more than essential, it is critical. In such situations, an aircraft’s performance or - in extreme cases - a flight’s safe outcome may literally depend upon precise attitude control.

Aircraft rotation and the initial climb attitude following an engine failure on takeoff (after V_1), wind shear escape maneuvers, high crosswind takeoffs and landings, “unusual attitude” or high speed/high altitude upset recoveries, or hand-flown instrument approaches when weather conditions are right at minimums are a few examples of situations requiring very deliberate and precise aircraft attitude control.

The good news is that these and similar situations are not encountered often. The bad news is that, because of the good news, it is possible to become a bit “rusty” at the precise control responses necessary to handle such occurrences.

That is why continuous practice is so important. That is also why training flights and recurrent simulator sessions often begin with steep turns and other “warm up” maneuvers to help sharpen pilots’ instrument cross-checks and polish their control finesse before beginning precision maneuvers. “Back in the day,” by the way, steep turns were much more challenging, as attitude indicators precessed significantly throughout the maneuver, autothrottles were nonexistent, copilot assistance of any kind was prohibited, etc. (okay, I know what you’re thinking...and no, the goggles and scarves did not get in the way!).

So, whether your machine weighs 2000 lbs. or 800,000 lbs., aircraft response and performance is a direct result of the precision with which you maintain aircraft attitude control. But, I’d like to suggest that there is another way that attitude control directly impacts aviation safety.

Yes, the aircraft’s flight attitude is always important, but so is the *mental* attitude of every person involved in or a part of the aviation community. Attitudes, after all, govern decisions, and decisions, ultimately, are responsible for safety records.

Attitudes like, “it’s no big deal,” or “nobody will ever know the difference,” or “I’ll get it fixed when I get home,” or “the rules apply unless the rules don’t fit,” or “let the feds worry about the big boys,” are just as dangerous as any “unusual attitude” encountered during flight...and must be countered just as aggressively as any inappropriate flight attitude. Remember that doing things the right way is *always* the right way. Remember, too, that any shortcut you take will *always* have consequences.

So, does attitude really matter? Attitude determines how both airplanes and people perform. And, performing well is what makes it possible for each to fly another day! ■

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