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OPINION

# Whom should you trust?

#### Choose your expert with care

BY MIKE BUSCH

**WE AVIATORS ARE OF NECESSITY** a trusting lot. We constantly trust other people with our lives, our safety, and our financial well-being. We trust nameless and faceless air traffic controllers to keep us from hitting anything. We trust our A&P to keep our aircraft safe to fly. We trust our engine manufacturer and overhaul shop to build an engine that won't quit at night or in the clouds over hostile terrain. We trust our aviation medical examiner to keep us out of trouble, our broker to help us find an aircraft that isn't a lemon, our insurance agent to keep us out of hot water if something goes wrong, and the list goes on.

But how can we tell if these experts upon whose knowledge we depend are trustworthy? How do we know they're giving us good advice? Should we seek a second opinion? A third?

Over the past three decades, I've had occasion to work with and advise many thousands of pilots and aircraft owners on a wide range of subjects: maintenance decisions, mechanic and shop selection, aircraft purchases, prebuys, insurance, litigation, and even occasional medical matters. Often these have been victims of poor advice obtained from experts they trusted, who then approached me to help extricate them from bad situations.

Based on these experiences, I have come to the conclusion that pilots and aircraft owners frequently do a miserable job of choosing whom to trust.

#### THINKING WITHOUT THINKING

In his 2005 best-selling book *Blink: The Power of Thinking Without Thinking,* Malcom Gladwell writes that we make judgments about whether or not to trust people based on near-instantaneous first impressions rather than on careful logical analysis. Psychology researchers have amassed a large body of evidence showing how often our choices of everything from politicians to spouses are largely based on such snap judgments. Their research shows clearly, for example, that our impressions of who is trustworthy and who isn't are often unconsciously but instinctively and



profoundly influenced by facial features such as the shape of cheekbones, eyebrows, mouth, jaw, and ears.

Gladwell's book cites a long series of entertaining anecdotes to make the case that such intuitive hunches often turn out to be more reliable than more rigorous and cerebral methodologies. While these stories seem at first glance to make a compelling case for the intuitive approach, a more critical reading reveals something that should come as no big surprise: The "go with your gut" method works reliably only for people who have lots of experience in the subject matter area in question. For relative newbies, it tends to fail miserably.

Imagine, for example, that your Beechcraft Bonanza's engine seems to be running a little rough. You take the airplane to a graybeard technician who has been swinging wrenches on Bonanzas for the past 40 years. He gives the engine a brief runup, and then tells you that your engine "feels" like it has a dirty fuel nozzle, and proceeds to pull the nozzles for cleaning. What are the chances that this IA's intuitive

diagnosis is correct? Pretty good, actually, because his intuition is based on decades of accumulated wisdom obtained through troubleshooting such issues hundreds or thousands of times.

Now let's replay this scenario, but this time imagine that the mechanic is a 22-year-old who just graduated from A&P school. How reliable do you suppose his intuitive diagnosis is? Probably not very. He might be smart as a whip (and hopefully is), but this newbie mechanic is most likely going to have to diagnose your engine issue the hard way—analytically—until he has enough experience under his belt that his intuition is based on wisdom.

The problem is that we aircraft owners never wind up gaining much experience choosing or vetting A&Ps, overhaul shops, medical examiners, brokers, and insurance agents. Most likely, we only make such choices a relative handful of times in the entire course of our aviation careers. It's not surprising, then, that our instincts

and gut feelings about who is trustworthy are often far from the mark. We're all newbies, after all.

Therefore, we need to be extremely wary of our first impressions of such folks. Much like that young A&P, we need to choose whom to trust the hard way—analytically. This usually means doing background checks, evaluating résumés, obtaining references, and all the other sorts of due diligence that we would do if, say, we were hiring a key employee or making a loan.

What does this mean? What exactly are we supposed to be looking for, anyway?

#### PREREQUISITES AND MOTIVATIONS

Let's start with the obvious: qualifications and experience. Those are certainly nobrainer prerequisites for any expert on whom we can rely. But what kind of qualifications and experience are we looking for?

Suppose you've just moved to a new home airport and you're looking for a

trustworthy mechanic to work on your Cessna T210. You locate a shop on the field owned and operated by an A&P/IA, and you notice that his graduation certificate from Spartan School of Aeronautics (arguably the world's largest A&P school) is dated more than 25 years ago. You meet the shop owner and notice an inviting smile bookended by symmetrical gray around the temples of his brown hair. Clearly this fellow has been wrenching on airplanes for a long time. Surely he has the qualifications and experience to be trustworthy to work on your airplane, right?

Not so fast. Maybe this mechanic spent most of the last 25 years working for the airlines or in a Citation Service Center, and really doesn't have much of a clue when it comes to your Continental TSIO-520. Or maybe he spent that time working at a Beechcraft specialty shop in Florida and knows Bonanzas and Barons like the back of his hand, but has very little experience with turbocharging. It might well be





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that rigging your Centurion's notoriously cranky landing gear retraction system is way above his pay grade.

The point here is that when evaluating a mechanic, avionics technician, or other maintenance specialist, the person's overall experience is far less important than the person's experience working on your specific make and model of aircraft or engine or avionics. To translate this into pilotspeak: Time in type is a whole lot more important than total time.

Even if you're convinced that an expert has impeccable qualifications and experience, that's not always enough to conclude he's trustworthy. You also need to look carefully at his motivations and determine whether they are consistent with or in conflict with your own.

Think about your motivations and those of your A&P. Can you trust him to do what's in your best interests, or only to do what's in *his* best interests? How much daylight is there between yours and his?

In one sense, aircraft owners and their mechanics want the same thing: an aircraft that's safe to fly. You want your aircraft to be safe so that you and your passengers don't get hurt. Your mechanic wants your aircraft to be safe so that he doesn't wind up getting in trouble with the FAA or involved as a defendant in an air crash lawsuit. In this sense, one might say your motivations and your mechanic's are different but consistent.

In another sense, however, aircraft owners and their mechanics want different things. If you're like me, you want to maintain your aircraft in safe condition but on a reasonable budget that doesn't max out your credit cards or decrease your FICO score. On the other hand, your mechanic wants to maintain your aircraft in safe condition in whatever fashion he believes to be least likely to get him crosswise with the local FSDO or make him look irresponsible in a deposition by your widow's plaintiff lawyer. In short, he wants to

minimize his liability. Unfortunately, it's rare for the least-cost (for you) approach to maintenance to be the least-liability (for him) approach. This creates an inherent conflict of interest in your relationship with your mechanic.

This is something you need to consider before accepting any shop's maintenance recommendations. Is the recommendation something that's truly in your best interests, or in their best interests? If you're lucky, maybe the answer is "both." Sometimes it's not.

#### A MOTIVATIONAL TALE

Recently, I received an email from an aircraft owner who found himself in a disturbing and costly pickle. He owned a piston airplane that he'd been trying to sell in order to upgrade to his first turbine aircraft. In preparing the airplane for sale, he took it to his A&P and asked that the mechanic find and fix a small oil leak in the engine compartment. While searching

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for the origin of the leak, the mechanic discovered a hairline crack in the engine's crankcase, and he advised the owner the engine would need to be torn down for a crankcase repair.

This is about the last thing an owner trying to sell his airplane wants to hear, but sometimes stuff happens. The owner agreed to have his mechanic pull the engine and ship it off to a nationally known engine overhaul shop for repair. The airplane was down for months. Ultimately, the repaired engine returned (together with an invoice for tens of thousands of dollars) and was reinstalled in the airplane.

The owner resumed flying the airplane regularly while trying to find a buyer. Then, 30 flying hours later, the engine abruptly seized in flight. The owner kept his cool, declared an emergency with ATC, and made a successful on-airport landing without scratching any paint.

The embattled owner called the engine shop to report what happened, and was told to ship the engine back to the shop. By now, the FSDO had become interested. Ultimately, the engine shop performed a forensic teardown of the engine (with a FSDO inspector in attendance) and concluded that the engine had sustained a crankshaft failure caused by "improper rpm adjustment resulting in detuning of the counterweights." Based on this "blame-the-pilot" diagnosis, the engine shop declined any coverage under its repair warranty.

The owner—an experienced pilot and sole operator of the aircraft during the 30 hours in question—is absolutely certain that at no time was the engine operated at any RPM outside of the POH operating limits. He is convinced the shop's diagnosis is incorrect and self-serving, but at this point what are his options? Although this engine shop's credentials and experience are unimpeachable, the owner now realizes that perhaps it was unwise to allow the same shop that repaired the engine to perform the forensic teardown after the repaired engine failed catastrophically.

Food for thought.

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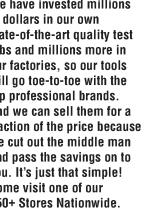
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