

[A Note About On-Line "Appraisals"](#)

Many buyers and sellers see proper evaluation of an aircraft as confusing, complicated and completely unnecessary. After all, who needs to spend money to find out what an aircraft is worth? Anyone can pick up a copy of a published value guide or go on the Internet to see what an aircraft sells for – right? The truth is, evaluating an aircraft really isn't all that complicated, but it is important to make sure all factors are considered when undertaking the effort of determining an aircraft's fair market value. It is important for a buyer or seller to know what a specific aircraft is worth, and as an owner you certainly want to know and document the aircraft's value for insurance and tax reasons.

Before discussing the methods of evaluating an aircraft, let's examine some of the most common mistakes people make. Then, we will look at the key factors that should be considered in establishing an aircraft's value followed by the evaluation of the most popular methods that are used in pricing an aircraft.

Of all the misconceptions that evaluators use, these are the most common.

- **Avionics** – Many owners who are selling their aircraft state that “thus-and-so” piece of gear is brand new or was put in a couple of years ago. The fact is, it doesn't matter. The piece of gear is either in the box on the avionics shop's shelf or in the aircraft. If it's in the aircraft, it is considered *USED*. Just like driving a new car off the lot, avionics gear loses value once it is installed. However, it will increase the overall value of the avionics package by some amount. Don't believe it? Go to your local avionics shop and ask them if they will buy that piece of gear in your panel at full retail. Don't be surprised when they laugh.
- **Avionics Age** – It is unclear where this concept came from although one of the published guides attempted to provide guidelines for age and value. However, it doesn't appear that anyone walks into an avionics shop and asks for a 1985 KX-155 and a 1983 Nav head. The truth is that the market value for a KX-155 and related Nav head (presuming it is working and in good condition) will hold up regardless of its age. Don't believe it? Check the “Used Avionics” section on any web page and see how many list the year of manufacture. It doesn't matter.
- **Aircraft rating** - How many times has someone said that the aircraft is an 8 or 9 overall? The problem with a rating like that is that the rating system is a relative comparison with 1 being the lowest and 10 being the highest. Average aircraft (for that year make and model) should be rated a “5”. Try this test. How do you think a brand new – right off the production line – 172 would be rated? If you said a “10” you would be wrong. For that year make and model, this is average – or a “5” rating. Rating it higher would produce a value that is too high. Turbine aircraft are also good examples here. Because businesses typically own these types of aircraft and have the resources to maintain them in good condition, you might think they would be rated 8's and 9's, but because they typically are in such good condition, they should actually be rated closer to average using a "relative" scale.

- **Installation Labor** - Sorry, this has no market value. This is the buyer's opinion. Vehicles are a great example here. If you were to buy a used vehicle, do you consider the amount of labor that went into installing the stereo system or any other add on? The fact is, the buyer will not pay for the owner's choice of mechanic.
- **Routine Maintenance** - Here again, the marketplace presumes that the owner keeps the aircraft in an airworthy condition and sees no additional value in routine maintenance or repairs that have been performed. That said, there is a time related value associated with annuals. This depends on the type of aircraft, but an aircraft that has just gone through an annual will command a slightly higher value than one that is just one month away from being out of annual – all other things being equal.
- **Recent improvements** - If you have just paid a tremendous amount of money to completely upgrade your interior, you will not get 100% of that investment out of it. The market value of that aircraft will increase but it will be determined by the quality of work, its present condition, and not how much someone paid to have it done or how recently it was done.

Now let's look at the factors that make up an aircraft's value. These are known as "value points". The most important ones include:

- **The aircraft's damage history.** This is more than just an understanding of what it cost someone to fix a particular damage event. It also includes an understanding of the level of damage, how it was repaired, and whether it was documented properly. The buyer's perception of the damage event is what drives the value of damaged and repaired aircraft.
- **Engine and airframe modifications (if any).**
- **Make and model of all avionics.** This value point can make up an exceptional percentage of an aircraft's value, so it is important to capture all avionics as accurately as possible by make and model.
- **Condition of the airframe.** This is not the condition of the paint. The condition of the airframe deals with items such as "fit and finish" of the panels, surface corrosion, dents and dings – just to name a few. It is quite possible to have a terrible airframe and a great paint job. Conversely, it is also possible to have a poor paint job but an airframe that is in excellent condition for its age.
- **Inspection status of the aircraft.**
- **Props and time since overhaul.**
- **Engine overhaul status.** This includes the time since overhaul, but also the type of overhaul that was performed. Having an engine overhauled by the factory versus one that is field overhauled to FAA service limits can make a big difference in this value point.
- **Condition of the de-ice equipment.**

- **Presence of logbooks and all related documentation.**
- **Condition of the paint.**
- **Condition of the interior.**

If any of these value points is overlooked, then the accuracy of the final result is going to be off.

Now let's turn our attention to the most popular methods of determining an aircraft's value. While each method has its own advantages or disadvantages, consider each method as it relates to two key items. The value points collected and the data used to assess the value. It is fair to say that if either the method or the data is questionable or incomplete, then the result will be much less than accurate.

First, let's consider one of the most inaccurate methods of determining value. What if a buyer and seller agree on a number and that number is not related to anything? It "sounds" right. There are few if any values points gathered, and there is certainly little if any data used. You might think this a ridiculous way of buying and selling aircraft, but it happens quite often. There is a saying that an aircraft is worth what someone will pay for it but that saying raises several questions. Is this an informed buyer and/or seller? Would someone else pay that same amount (all things being equal) and would this aircraft sell at that price in a reasonable amount of time?

Another method uses classified advertisements. The use of a classified ad (while more accurate than picking a number out of the air) relies on the ad to use reliable data and capture all value points. Unfortunately, the published figure is an "asking" price and does not reflect the actual selling price (which represents the market value). Sellers/brokers/dealers who publish information about their aircraft tend to gloss over many of the key negative value points. As a result, aircraft being submitted where this method has been used for evaluation will tend to be priced higher, resulting in an artificially inflated advertising environment. Aircraft that are priced too high will tend to stay on the market longer and over time the actual selling price will need to be reduced to the current market value or the aircraft will have to remain on the market until the overall market rises. This process can take months and cost the aircraft owner additional interest, tie down or hangar fees, insurance, etc. Pricing the aircraft in relation to its current market value will result in a faster sale.

The method most commonly used by banks, aircraft brokers, dealers, insurance companies and many websites relies on a published aircraft price guide. The belief is that this information is accurate and reliable since it has been used for many years. These guides are quick and fairly easy to use by just about anyone. But let's look at the two key factors - the data and value points. When analyzing the guide's data, the first questions that should be asked are – Where do these figures come from and how accurate are they? The source of the data is unknown but it appears that some is derived from the book's subscribers who complete a questionnaire periodically. It is unclear how the publisher determines the reliability and accuracy of this data. Many of the value points highlighted earlier are also not addressed in these publications.

However, the guides typically contain a tremendous amount of useful information such as engine TBO times, AD abstracts, aircraft performance data, and so forth. These publications also provide some guidelines for evaluating aircraft using their data along with some examples. Used correctly, it is possible to determine a “ballpark” value for a specific year make and model of aircraft – presuming that the source data represents current market values which is questionable. However, it is important to note that several assumptions are made with these figures, and understanding those assumptions is important in using any published guide correctly. In situations where the aircraft has damage history or missing logbooks for example, another method will be needed. *It should be noted that one of the largest publications clearly states in the front of the book that the guide **cannot** be used to appraise a specific aircraft as there are too many variables to consider and they recommend the use of a professional appraiser.*

One method that is gaining popularity and is available to just about anyone and is on the Internet. It was developed by the [National Aircraft Appraisers Association](#) (NAAA). Although many of the published guides offer an Internet or desktop software version, this tool (only available through a subscription to Trade-a-Plane’s web site) is unique for several reasons. It uses a database that is derived from aircraft selling prices (market values) and it is verified by the NAAA to be accurate and correct. It provides a range of values for a given aircraft – based on the detail provided by the user. For example, you can simply ask the program to provide information for a 1978 Cessna 172. It will provide a range of values along with a set of assumptions and what it believes the value of that particular aircraft to be. The value range simply means that two thirds of the 172s in that year will fall between the high and low values. The more detail you provide the tool, the more accurate that figure will be. It captures most of the important value points – including items such as damage history - and provides a good approximation of the aircraft’s fair market value. The data is updated monthly instead of quarterly, as is the case with published guides.

Up until now, only methods which provide an estimate or market analysis of the aircraft's value have been discussed. It is apparent that some of these methods will be more accurate than others. However the most accurate method available takes into account all value points and uses data based on actual sales figures or current market value. In this situation we are talking about having the aircraft professionally appraised.

If you read the fine print on any of the published guides and web sites there is usually a statement that indicates that the publication is only a guide and does not take all factors into account to determine a specific aircraft’s market value. In those situations, when it is important to know the current market value for a specific aircraft, or to completely and accurately document an aircraft, an appraisal is required. Appraisals and market analyses are typically and easily confused. One way to quickly test if you are getting an appraisal or market analysis is to understand:

- 1) Who is performing the evaluation? And,
- 2) Is someone going to be physically looking at the aircraft and its documentation?

The person performing the appraisal is critical because they should be completely unbiased about the aircraft and should be certified by an agency to perform aircraft appraisals. For example, real estate appraisals are not performed by the seller, the broker, the selling agent, or the banker. Individuals who are close to the deal tend to weigh things in their favor or their customer's favor. After all, we are all human and we all have that tendency.

The other critical component is to actually examine the aircraft, its documentation and systems. This is the only way to accurately capture all value points and verify their condition. Anything less means that the evaluator gathered information from someone else who may or may not have firsthand knowledge about that aircraft, or the details could be obtained from someone who is most likely biased in some way. In either case, you are getting a market analysis and not an appraisal.

When looking at professional organizations that have a track record in aircraft appraising, the one that stands out and has a good reputation in the industry is the National Aircraft Appraisers Association. The NAAA is the oldest and largest organization that is focused exclusively on the evaluation and documentation of aircraft.

In summary, it all boils down to a couple decision points. Who do you want to gather the data points and perform the analysis? How detailed and accurate do you want the evaluation to be? Do you want the results clearly documented? If you are an owner, you may want to have the aircraft appraised for insurance reasons. If the aircraft is severely damaged or destroyed, you will have a much stronger argument when discussing the value of your aircraft if you have an appraisal report in your possession. If you are buying an aircraft you wouldn't have the dealer or broker perform the pre-purchase inspection so why would you ask them to perform the appraisal? The most intimidating customer for any broker/dealer is one who is fully informed. Regardless of the method you are most comfortable with, make sure you capture all value points and use up to date data for your evaluation.



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