



# The Real Cost of Airplane Ownership<sup>©</sup>

Gary Palmer Feb 29 2022

You have a pilot certificate and want to fly, but are starting to consider the costs and wonder what options might work at a lower cost. Having an airplane can be summarized in three phases; acquire, maintain and fly. A plane must be acquired either through rental, ownership, joining a club or a partnership. Once a plane is acquired, it needs to be maintained to remain in safe and legal operating condition and airworthiness. This includes a level of legal obligations (maintenance and inspections). And finally, with a plane that is legal to fly, a pilot gets to enjoy flight. That flight can be fun, work or building hours for a future job; each hour comes with a cost. Let's look at options for these phases and then explore the real cost of your flight hours. Remember that your mission for flying will influence your decision, and it should!

## Acquisition

Having a plane available offers great opportunity for adventure and freedom. The ways you can get a plane are basically; rent or purchase. A purchase brings several options.

1. You can simply purchase it and become an owner,
2. You can join a partnership, or
3. You can join a club.

## Ownership

Ownership is the easiest and very straightforward, you own it, you maintain it and you fly it whenever and wherever you want. You can usually plan when it is in the shop for scheduled maintenance or other reasons (like new upholstery). That ease and convenience comes at a price and ownership may not be the most cost effective.

## Club

A club is typically a lower cost to join because there are more people sharing the airplane(s). The club owns the plane, you are a member of the club. Clubs typically charge a fee to join, a monthly fee to maintain your membership, and an hourly use rate based on the airplane flown. The benefit is that this hourly rate is normally much lower than (sometimes it can be almost half the cost of) high end rentals. The negative side is that the plane is first come first served and accessible to all members. There may be some rules about monopolizing the time or overnight trips, so read the rules carefully. Someone looking to fly frequently (like a time builder) can become frustrated by not having desired access due to others utilizing the plane or a maximum usage per month. There is not always a

guarantee of availability, but typically you can book the plane and have it available. The club will have people maintaining the aircraft making maintenance easier.

## **Partnership**

A partnership is very similar to a club. The major distinction, which some clubs also offer, is that you are buying to own a share of a specific airplane. You are buying a commitment of airplane availability each month. You can also take advantage of access when another partner is not using their time. A partnership is typically four to six people. The cost to “buy in” is higher because you are becoming one of the owners of the specific plane. Your name will be on title or ownership documents. Sometimes for legal purposes the plane is owned by a legal entity (like a corporation) and you become one of the owners of the corporation. The small number of partners limits demand for the airplane to just the specific owners. Also, time can be negotiated as a commodity since each owner has an “owned” amount of time each month. Because of the lower number of owners and more direct ownership, it is often easier to organize the maintenance on the plane as well as the occasional upgrade. While buy in costs are higher for a partnership, you own a piece of the plane, if you want to leave you can sell your share possibly for what you invested. A partnership provides more access to the plane with an opportunity to recover some of the expenses when you leave it, that is not how a club works. The “hourly” cost for a partnership is how the maintenance costs are recouped, this is not a “rental” fee but a reimbursement to the partnership for the hours you “used up” flying your plane.

## **Maintenance**

Maintaining an airplane is very important given the required inspections and regular maintenance. At the least is the annual inspection which typically starts at \$1000 and goes up. The actual cost depends upon many factors all revolving around the type of airplane, type of engine, number of engines and geographic location. For example, in Los Angeles an older Cessna 172 in good shape can cost \$1000 to \$1500 if no problems are found.

There are (per engine) oil changes, depending on the quality of the oil and the number of quarts, the cost can start at about \$100 but run up to several hundred. An oil change is a recurring item typically performed between 30 and 50 hours although some pilots push further. This is a matter of preference and a desire to take best care of the engine.

There are other normal wear items like brakes and tires which have a useful life and just wear out after some number of hours of use. A renter has no maintenance costs because maintenance is buried in the hourly rate. A club has the same maintenance as a partnership with one addition, the 100 hour inspection. The 100

hour inspection is required for all airplanes rented. Clubs, being the owner of the plane and “renting” to members qualify under an FAA rule which requires a 100 hour inspection. The 100 hour inspection is basically the same work as the annual, the entry in the log book is different. The club dues and hourly rates are designed to recover this cost as well as other maintenance and inspections. Clubs can be structured different, so these are generalities as a specific club may differ. In a partnership, the “partners” own the plane and thus do not rent it, avoiding the 100 hour inspection requirement and cost and splitting all the other costs of “ownership”.

## Flying

Really, it is about flying. All that other stuff about acquiring and maintaining is so you have a plane to fly when you want to fly. So what’s left is really about access to the plane. As an owner you enjoy the freedom to use the plane on a moments notice whenever you want. Simply put, the highest priced item gives the highest flexibility and accessibility. If use is infrequent and can be planned in advance, or the added management of ownership is undesired, then renting a plane may be a better option. But if you are looking for more reasonable costs, perhaps because after building time and experience you will then want to find the correct plane for your missions, then consider a club or partnership. The club and partnership each offer benefits. Clubs have the lowest entry costs but you have more contention for the planes and lower guarantees (if any) of available hours. A partnership has a higher buy-in cost but offers guaranteed hours, fewer people competing for access, more ability to trade “time” since members “own” some of the hours, and the option to sell your partnership when you leave.

## Costs

While there can be large variations, these are representative costs in the Los Angeles area. These numbers do not include the purchase price for owner or partner (recovered upon sale) nor the membership price for the club (irrecoverable). These number are adjusted to be wet rental, which includes fuel. An average price for a single hour rental of a Cessna 172 in Los Angles is around \$175. A similar owned plane is about \$90/hour. A club plane is also about \$90/hour. A partner hourly is about \$80/hour because fixed costs are all shared. It is helpful to note that rental planes normally pay per Hobbs hour and owners and partners pay by tach hour. Clubs decide their charge basis. An hour on the tach is between 1.15 and 1.30 Hobbs hours.

## Summary

It is always about the mission, why do you fly? If you are doing it for the love and joy and want to fly every day, then buy an airplane. If you want access to a known and specific plane on a regular basis, then a partnership. For access to one

or a few planes with less assurances of individual availability but lower cost than a club might work. Rental is simple, usually the most convenient and highest cost. It is really about the mission, find yours and then your optimal solution.