

Pactola Flying Club Cost Estimates

So what is it going to cost to join and fly in the club? It depends on the number of club members there are to spread the cost and the minimum acceptable airplane to which members agree. In the estimates below I tried to use conservative values, which means actual costs should be lower than shown.

Three aircraft are used as examples:

1. Average IFR equipped 1975 Cessna 172M with 1000 left on TBO currently sell for roughly \$100k.
2. An IFR equipped member-built Zenith 750 Cruzer using a Viking Aircraft engine can built for under \$75k. Instead of a TBO, will pessimistically assume the entire engine is replaced every 1000 hours for \$13k.
3. IFR equipped Cessna 150s are for sale under \$40k – typically around \$35k. I'll use the \$35k C-150 numbers for the second example.

Since both AOPA and EAA suggest 10 members per aircraft as the best trade-off between lowering costs per member and minimum scheduling conflicts, I'll use that as an upper member count per airplane. A viable minimum seems to be around 5 members for a non-profit club. Fewer than 5 may be better simply going co-ownership.

There are several alternative options for financing a purchase besides a commercial lender, such as:

1. Owner financed loan (i.e. owner carries a note, meaning they act as the bank.)
2. Those club members with greater financial resources lend money to the club to purchase an aircraft. Note that there is no requirement that all such lenders lend equal amounts. Merely that they are repaid at the same interest rates and term lengths (no member favoritism.)

The following estimates assume use of a large (\$330/mo) hangar at Rapid City Airport. Avgas is assumed to cost \$6.70/hour (national average per <https://www.airnav.com/fuel/report.html> at time of estimate.) AOPA's cost spreadsheet was used to generate the estimates and prospective members should use it to test changes in the assumed costs. Please note that the spreadsheet has two tabs – one for equity and one for non-equity membership type clubs. The AOPA estimates for insurance and some other values were not changed and may be either too low or too high.

Other assumptions for all scenarios:

1. Purchase:
 - a. A purchase at 30% down payment, 10 year term at 9.5% interest.
 - b. One or more members are willing to co-sign the loan.
2. Lease:
 - a. A lease at 5% base rate (which means paying 5% of the value of the airplane per year. AOPA's spreadsheet and sample lease agreement use a default of 5%.)
 - b. A (local?) owner can be found willing to lease exclusively to the club for at least a year. They would be required to join the club if they wish to continue using the airplane.

| Airplane Ownership | Number of Members | Joining Fee (\$) | Monthly Dues (\$) | Wet \$/Hour | Dry \$/Hour | 50 Hrs/Year Cost (Effective rate) | Minimum Yearly Cost |
|--------------------|-------------------|------------------|-------------------|-------------|-------------|-----------------------------------|---------------------|
| C-172 Purchased | 10 | 4300 | 180 | 105 | 45 | \$7410 (\$148/hr) | \$2160 |
| | 5 | 8600 | 360 | | | \$9570 (\$191/hr) | \$4320 |
| C-172 Leased | 10 | 690 | 125 | 105 | 45 | \$6750 (\$135/hr) | \$1500 |
| | 5 | 1400 | 250 | | | \$8250 (\$165/hr) | \$3000 |
| C-150 Purchased | 10 | 2000 | 125 | 80 | 40 | \$5500 (\$110/hr) | \$1500 |
| | 5 | 3900 | 245 | | | \$6940 (\$139/hr) | \$2945 |
| C-150 Leased | 10 | 690 | 105 | 80 | 40 | \$5260 (\$105/hr) | \$1260 |
| | 5 | 1400 | 210 | | | \$6520 (\$130/hr) | \$2520 |
| Cruzer Built | 10 | 3300 | 160 | 70 | 30 | \$5420 (\$108/hr) | \$1920 |
| | 5 | 6500 | 320 | | | \$7340 (\$147/hr) | \$3840 |

Personal observation is that the Cruzeiro has several advantages over the 150 and 172, such as generous cockpit size, excellent visibility, zero-time airframe and engine, all-new avionics, and lower maintenance costs. However, members may not wish to invest months of time before the airplane can fly. Purchasing a recently built but used experimental in the same price range is another possibility that would provide more instant gratification.