



Q1 2022 Newsletter

Note from the President

Tom Letts, President

They said that time flies when you are having fun. I find that time flies no matter what you are doing. 2022 has been touted as the year of new beginnings and yet we find ourselves once again wondering what is going to happen not because of the COVID virus, but because of world affairs.

The one thought that keeps me up at night is where will we end up with fuel costs. We have prided ourselves on providing aircraft at the lowest possible hourly rate, yet it may come to the point that once again we may need to raise the hourly rates again to cover the fuel cost.

Maintenance is another struggle JEFA is having. JEFA has an amazing mechanic, yet he has a full-time job. We have tried to engage with the repair shops on the field, yet most of them do not want to work on single engine piston aircraft. Even getting parts for the planes is a real struggle. Please be patient with us as we continue to work on all of the maintenance issues.

It has been asked of the JEFA board with the financial reserve that JEFA has why doesn't JEFA use those funds to make a down payment on a new (to JEFA) plane? The JEFA board absolutely has that ability, yet if we do move in that direction, we could find ourselves asking the members to pay for large ticket items like new engines, new avionics, major repairs, and/or the full cost to insure JEFA's assets. The JEFA board is trying to be good stewards of the assets that JEFA has.

The Board has been looking to take JEFA in a new direction for 2022 and beyond. The board is looking at raising the initiation fee to join JEFA, along with raising the monthly dues for those new members. The JEFA board is looking to bring on new association members that want to be part of JEFA not as renters of aircraft, but as true owners of something that is amazing. In the coming months you will hear more about that.

I truly want JEFA to be a place where members can come and share their aviation adventure with other JEFA members. I want members to feel JEFA is an amazing organization to be a part of.

We all LOVE flying and that is why JEFA is successful. If you have ideas that will make YOUR JEFA better, please talk to one of the board members with those ideas.



Safe Flying Everyone
– Tom

Finance Update

John Pettinger, Treasurer

I have been busy learning all of the tasks that I need to know as your new Treasurer. I was a little overwhelmed with all of the touch points that are involved: QuickBooks, Flight Circle, PayPal, CardPointe, Chase Bank to name a few. I am still learning, but it is very clear to me that a fellow member has taken on a huge task for several years and invested hundreds of hours for our association. He kept the finances straight, and I appreciate him as my mentor for this new position. Next time you see Mike Schulte, please thank him for his dedication to the association.

I am the "new guy" to the board and was interested in how much effort the board members give to the association. I have already participated in a few board meetings and quite a few other e-mail strings. I am truly impressed with the commitment that all of the board members have given to our association. This is more than an occasional task; it is a part-time job.



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As of March 15, 2022 we are solid in our financial future:

Checking account \$54,550.25
Savings account \$51,201.33
Total \$105,751.58

That seems like a large amount of money for a non-profit organization, but there are a few expenses that are in our future. The Diamond Star is at its' TBO time, but continues to run strong. When it is time, I have heard that a new engine can cost up to \$38k. We also have an expense with the N53265, panel and it could be several thousand dollars for repairs.

N53265 may not be at the end of her TBO but we have to save for the engine overhaul and possible increase in horsepower when it is due.

As of this writing, fuel prices continue to climb. Denver Jet Center gives us a discount on fuel, but the last bill (before discount) was \$7.25 per gallon!

I can see within 12 - 18 months, we can have half in the accounts. Something to be aware of when you think that we have a lot of money.

I appreciate the opportunity to serve the association and hope that I meet everyone's expectations.

– John

Operations

Adam Yeagle, Director of Operations

The winter offered up many flying days this year and many of you took advantage of that. Unfortunately, some maintenance issues for both aircraft caused some to not fly. The board has worked very hard to keep the aircraft flying and in good airworthy order the last several months and when possible, taking advantage of the bad weather days to get items taken care of. I must give a big thank you, and I'm sure the board echo's my thoughts, to our mechanic. Not only has he done a great job keeping the aircraft going for us, but he also does all of this on top of a full-time job, family and many other

factors outside of the airport. If you see him out and about the airport, please say hi.

I know we have had to wait a few days for him to become available here and there to take care of an issue, but without him, the aircraft would be down for months, even for simple fixes, due to the fact that we have been unable to get any communication back from the main maintenance shops on the field. We are not the only aircraft that have had the issue either. Several customers have had to try and find mechanics like ours that are willing to work on the older aircraft, specifically single engines, as the main shops only seem to want to deal with high dollar aircraft now. Because of this, I ask that you all please be patient when we do have maintenance issues, as it is not as easy as you may think to get them taken care of.



Aside from the issues in getting maintenance taken care of, our mechanic has managed to get the DA40 in great flying shape. The recent 100hr saw the DA40 getting a new nose wheel fork, all new tires and the rest of the open squawks fixed. So far reports have been great from members flying and not having any issues with the nose wheel on takeoff and landing. Please remember to fly the nose down and not let it drop. This will help to make sure the issues we saw do not show up for a long time.

The C172 has had several issues with the primer and the flaps. Items that the board finally grounded the aircraft on 3/18/22 until it could be corrected. As of 3/24/22 the primer and flaps issue has been corrected and the first flights have had great reviews. The board is also in the



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works to correct the lingering glideslope issue with the GI275 and the failing directional gyro. We have the solution and are waiting for our window to have it corrected. We will provide more information when we get closer to the work being done.

As a final note, please remember that both of our aircraft are getting older. This means not everything will work as new, sometimes they may not be able to be fixed to personal liking due to part availability and we cannot accommodate all members requests of enhancements or nice to haves. But, as director of operations, I will promise that the board is giving our JEFA members safe, reliable and airworthy aircraft. As always, if there are any issues with the aircraft, questions of status or where something might be, please let myself or a board member know, and we will be more than happy to help.

– Adam

Safety Corner – Weight and Balance

Mark Smith, Director of Safety

One of the joys of GA airplane travel is that you don't have to limit liquids and gels, remove your shoes, or go through airport security scanners. So, you pack everything you want, only to discover that your personal pilot is far more ferocious than the stone-faced screeners at Big Airplane Airport. Upon seeing your bags and bundles, your pilot freezes, scowls, and states (or shouts): ***You can't take all THAT in THIS airplane!***



Your offer to squeeze it all in doesn't soothe the pilot. On the contrary, he or she gets even more agitated because ***"you just don't understand how it works!"***

Because knowing something about the basics of aircraft weight and balance could reduce some of the tension that can arise, here's the story.

A-Weigh We Go

The description of GA aircraft as "light airplanes" is apt, because light is the name of the game. The lighter the airplane, the faster and higher it can fly with a given engine. Also, keeping the aircraft light enables the pilot to carry more fuel, more passengers, and/or more cargo.

Notice that I said "and/or" —not just "and." GA flying involves tradeoffs. The presence of four seats doesn't mean it can always carry four passengers, especially if those passengers have baggage. Nor can the pilot just fill the tanks and launch. Here's why.

To stay aloft, the airplane's wings must be able to generate enough lift to equal the weight of the airplane and everything it carries. When an airplane is made, its manufacturer determines its maximum gross weight — stating, in essence, that the airplane can generate enough lift to carry that amount of weight. The pilot decides how

to use the set "weight allowance" on any given flight. In most cases, it is simply not possible to load a light GA aircraft with full fuel, full seats, and passenger bags without grossly exceeding maximum gross weight. So, the pilot has to make choices about how many passengers, how much baggage, and how much fuel to carry (which could result in more fuel stops).

Hanging in the Balance

Having dutifully limited your luggage, now you wonder why the pilot starts rearranging the items you've stowed in the baggage compartment, and why there are passenger seat assignments.

That's where the "balance" part comes in. To be stable in all phases of flight, an airplane's weight must be balanced around a point within a fairly narrow range of values established when the airplane is manufactured. The idea is to avoid loading the airplane in a way that makes it either nose-heavy or tail-heavy.



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To achieve this goal, the pilot uses the manufacturer's charts and graphs, or apps containing that data, to make a weight and balance calculation. To determine weight, the pilot starts with the airplane's published empty weight, and totals the weights for passengers, bags, and fuel to calculate the total weight.

After verifying that total weight is below maximum gross weight, the pilot calculates the airplane's "center of gravity," or CG. This process involves multiplying each component of the weight by the published "station" value for its position in the airplane to produce a value called the "moment." The pilot divides total moments by total weight to determine the CG—the airplane's balance point. The final step is verifying that the CG is within the acceptable range. If so, good to go. If not, the pilot moves passengers or bags until the CG is acceptable. And don't forget one final consideration for us Aviators operating in high density altitude flying, aircraft performance! You can load the aircraft with that much weight, but should you?

Fly safe out there.

– Mark

Membership

Robert Greenlee, Director of Membership

Congratulations to these guys...

- **Natalie Gramer – Instrument rating**
- **Jason Biller – CFI certificate**



Spaceballs and you, a case study

Tyler Bachelder, Director of Training

One of my favorite movies is the Mel Brookes classic Spaceballs. Among the dozens of great one-liners, one of my favorites is when Dark Helmet proclaims, "What are you preparing?! You're always preparing! Just go!" If you've seen the movie you know how well that proclamation worked out for Dark Helmet. If you haven't seen the movie, I must ask, what on earth are you waiting for?! It's been out for 35 years now!

Despite the comedic treatment of the Spaceballs "always preparing," this preparation mindset is a foundation of all professional flying. Pull up just about any flight deck video on YouTube and you'll see the crew "briefing" this, and "briefing" that. In crew environments, briefings are necessary to ensure both pilots are always "on the same page." However, even in single-pilot GA operations, thorough briefings can help you anticipate what's about happen. A key lesson I teach all my students is to NEVER put the airplane somewhere your brain and eyeballs have not already been. So how can we in the GA world incorporate this safety mindset widely utilized by the commercial world?

A great place to start is before the airplane is even pulled out of the parking spot, by conducting a quick "taxi briefing." Whether this is your first flight out of the

JEFA parking spots, or your 1000th, it never hurts to remind yourself where you are and where you are going. What taxi route will you use? Where will you plan on doing a run-up? What runways are in use, and which one will you plan on departing from given wind and aircraft performance considerations? Along your taxi route, are there any closure NOTAMs that may affect you and require an alternate route? Most importantly, are there any hot spots on the airport diagram to be vigilant of?

After you've safely made it to the runup area and finished the preflight checks, but before you call ground, complete another quick briefing for the take-off. Refresh your memory on what the take-off plan is and what you'll do if it doesn't go according to your plan. Start



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with the length of the runway and your take-off distance. (After all, you did calculate that information as required per 91.103, right?) During your take-off roll, what factors might cause you to abort the take-off? My standard boilerplate is “anything abnormal, loss of engine power, or an annunciator light.” (Feel free to use that if you need a starting point.) If the take-off is aborted, what will that procedure be? It will be different if you’re on the ground or just lifted off, so brief both contingencies. If you are flying with another pilot or flight instructor, who will fly the airplane in an emergency and who will work radios/checklists? Always plan on the worst in this phase of flight and be happy when it doesn’t happen. After you’re airborne, what will you do to depart the airspace safely and get on course?

Even as your flight approaches the end, your job still isn’t done. A good approach briefing is known to all instrument pilots (briefing the instrument approach you are about to fly), but this is a useful tool for VFR pilots as well. On take-off, we briefed how we’d safely get away from the airport, now is our chance to brief how we’ll safely get back into the airport. What pattern entry can you generally expect from ATC given your location? Which runway will you most likely be given based on traffic considerations, and which runway(s) are you comfortable accepting? Once lined up for the runway, what will it look like so you can confirm you’re lined up with the correct one? (“Wrong surface operations” continue to be a major problem, especially at airports like KAPA with close parallel runways). After touchdown, where can you expect to vacate the runway, and what taxi route will you use back into the parking spot? This is a great chance to brief anticipated hold short instructions as well (“hold short of runway 35R at B8” sound familiar?).

If you’ve been flying out of Centennial for years or even decades, this might seem overkill. However, that attitude of complacency is exactly what thorough briefings are intended to overcome. If nothing else, it develops a habit for those times you are not flying out of KAPA. After all, what’s the point of flying an airplane if you aren’t going to actually take it to other airports?

As always, if you want some professional guidance on how to accomplish these briefings in an airplane, myself, or any of the wonderful JEFA instructors would be happy to help so give us a call.

– Tyler

JEFA History and Future

Mike Schulte, Director of Assets

JEFA was founded in 2004 as a 501(c)7 “recreational club” for the purpose of providing Jeppesen Employees the opportunity to experience flight and see the value Jeppesen products bring to the flying experience. Employees had a chance to learn to fly with great equipment at very competitive rates that could not be matched through commercial means. It was a place people could gather to talk and learn about aviation and pilots could fly with a purpose by providing flight experiences through the EAA Young Eagles program and flying patients of Craig Hospital. Members would gather for summer family picnics, quarterly members meetings, and see each other in the halls at the office.

The association was made possible through the generous grants provided by Mark VanTine and Jeppesen. Seed financing was provided for our aircraft and periodic funding was provided to upgrade the avionics and software. Jeppesen would also pay for the Young Eagles and Craig flights. This would amount to \$32,000 - \$40,000 per year.

In 2018, Boeing absorbed Jeppesen into the new Digital Aviation organization and stopped the funding that was so important to the JEFA business model. Since that time, JEFA has been working to cut costs and stabilize the cash flow, pricing model, and membership composition to ensure the association’s viability and success. This entire time, JEFA has not changed its mission:

JEFA is formed exclusively for pleasure, recreation, and other non-profit purposes specifically to foster, promote, engage in, and conduct all phases of flying and flying-related activities in a manner to promote personal contacts and fellowship among its members including the providing of education about flying.



Q4 2021 Newsletter

It's time to take a look at that mission statement and ask ourselves if we are doing all we can to realize that mission? Is that mission still relevant and does it reflect the direction we want to go in the future?

One of the things that makes JEFA so special is the specific status members have in the association. We are all equal member owners. I think that means more to some than others, but it means every voting member has a vested interest in the direction and composition of the association.

Who is JEFA today? We have 79 members in Flight Circle. 11 are instructors and 9 are board members (three are both). Despite the fact that 24 of our members have not flown in the past 12 months, we have stopped adding new members due to scheduling contention concerns. Of those that flew, the top four averaged 70 hours, the bottom four averaged 1.1, and the average of everyone that flew was 14.5.

Our two airplanes flew a total of 884 hours, with the Diamond flying more than the 172 at 504 vs 380 respectively. Maintenance was surely a factor in the disparity, but that's a lot of hours for two airplanes.

Financially, JEFA owns the 172 and the hangar outright. We still owe ~\$30k on the DA-40 with the loan maturing in three years. Our operating model has proven to be resilient and provides a good cash flow to help us maintain our operation.

So – fellow member owners – what do we do now? If we do nothing, we will be what we are and maintain our current fleet, membership, and model moving forward. Some members may be fine with that and some may even like that.

Another consideration would be to grow the association, both in equipment and membership. This would provide additional capabilities that would be attractive to a wider range of pilots and help us get maximum value out of our existing assets. A larger and more experienced membership could help reduce insurance costs overall and provide additional resources and ideas to manage the association in the future while still providing the same great equipment and opportunities we enjoy today.

The board is working on a proposal to purchase a Cessna 182 for the association. A 182 makes sense as our next acquisition because it provides capabilities in the areas of useful load and mountain performance that our current fleet is unable to do. These are characteristics that many members have indicated are important to them. To make this happen, it will require nominal commitment from all our members, and then a more substantial commitment from members (and new members) who would be interested in regularly flying the 182.

Before we embark down this path, we will need to ensure we have adequate commitment from the membership. What would this look like?

The only expected change for everyone is that dues would increase from \$20/mo to \$30/mo.

For those that would like to fly the 182 regularly, we would need a minimum of 20 members (or future members) to commit \$2,000 in order to raise enough money to cover the down payment and closing costs on an aircraft valued around \$165,000. Investors would then receive a \$40/hour discount on all flights in the 182 for two years. All other members would be able to fly the aircraft at the normal rental rate. If the normal rental rate is \$160/hour, investors would pay \$120/hour. You can't beat that anywhere!

If the association is going to grow, it's up to us members to make that happen. The alternative is to maintain what we have. The choice is yours.