“TWO HAPPY GUYS” – REMEMBERING GEORGE NASON

By Richard Zapf

Yesterday, November 14th, my good friend and mentor, George Nason, passed away due to complications related to Parkinson’s Disease. What follows is something I wrote for George to summarize some of the events that he and I had shared over the past twenty-five years. I hoped it would give him a bit of a lift as his health declined, and at the same time, let him know how valuable his contributions to our local FAC squadron are. The enclosed photo is a selfie that he took of us flying in a J-3 over the North Shore of Massachusetts. He named the photo ‘Two Happy Guys’. He suggested that we fly it out to Geneseo and enter it in Power Scale.

A few days ago I got a very nice letter and a plaque from FAC-GHQ congratulating me on exceeding four hundred Kanones. I would have liked to have received it at Geneseo, but my doc and wife conspired to waylay me for an emergency quad bypass. I’m going to have a word with both of them about setting proper priorities. As any FACer knows, such victories don’t come easy due to the caliber of local and national competition. When I consider my personal success, I attribute most of it to George’s influence. Without his help, I’d still be knee deep in the green stuff dorking away and hoping for a flight to exceed twenty seconds.

What many people in the FAC don't know is that George is one of those people in the background who quietly coached others while choosing not to compete himself. Before I launch into George's contributions, I'd like to share a few examples of his competency as a flier and a modeler:

1. The Quickie fiasco: One day when I visited George, he had his dining room table covered with beautifully crafted models made from 5x8 card stock. One was a model of a Burt Rutan Quickie, with its forward wings having extreme anhedral and its rear wing having significant dihedral. The whole contraption looked like a version of an X-wing fighter. George said, "This airplane has very dangerous stall characteristics, and it is bound to kill someone." He then proceeded to glide the model across his living room, and the first few glides were perfect, with the Quickie touching down with no problem. But as George adjusted the speed of the glide, ugly things began to happen. The Quickie would appear to be on a perfect glide path and then suddenly tumble out of the sky in an unrecoverable stall. George demonstrated this several more times, and after sitting down, he said, "The incidence in the wings are all wrong, and both the aft and forward wings stall simultaneously making stall recovery impossible." I don't know if Rutan had made adjustments to account for this vicious stall characteristic, but as a newly minted general aviation pilot at the time, I figured I'd pass on ever considering a flight in a Quickie.
2. B-1 Bomber attack on the FAC: Later that day we sat at his dining room table, when George lit a candle and produced a tie tack box. Inside the box was a B-1 bomber meticulously carved out of pink foam. George raised the bomber over his head and let it go. It made several circles around the table, occasionally rising on the thermals created by the candle until it came to a smooth landing on the table. I told this story at one of the endless bull sessions in the dorms at Geneseo, to

the disbelief of my audience. George just happened to walk by, and he happened to have the tie tack box containing the bomber with him. To the amazement of about twenty potbellied middle aged guys decked out in t-shirts that said things like Cessna or P-38, he launched the B-1. It wandered about making several circuits of about six feet in diameter until it was at waist high altitude. At that point, George captured it and put it back in the box. He explained that he didn't want it to land on the floor lest someone mistake it for a bug and stomp on it.

3. J-3 Cub disaster: As part of our one design indoor series, one year we chose a J-3 one page plan out of an old Flying Aces or Model Airplane News. It looked fun and since it was a J-3, it was bound to fly - WRONG! It turned out to be one of the worst choices we ever made. Only two people were able to make the thing fly. One was Ray Harlan (no surprise there) and the other was George. Since George never entered in competition, nobody paid much attention to his progress with the beast until the outdoor NATS at Geneseo. As happens at Geneseo, when someone puts up an interesting flight, it will usually cause the gathering of a group of admirers. While retrieving one of my models, I saw such a group and immediately scanned the sky for what I thought might be a Curtiss NC-4 or B-17 with all engines turning. Nope! Instead, the tiny speck turned out to be a lowly J-3. No big deal. There are usually tons of them at Geneseo, and unlike our one design they all fly great. Then I looked again, my jaw dropped to my kneecaps as I realized that this one was flying tail first! George had done it again and took that miserable beast and made something of it.
4. The Breakfast flight: Sitting at breakfast at Geneseo, someone commented about his B-1 Bomber, and he was skeptical about its flight characteristics. Rather than engage in a debate with the FACer, George whipped out his trusty Swiss Army Knife and began trimming one of the paper place mats. In a jiffy, he had

fashioned a reasonable resemblance of the B-1. To add some nose weight, he dipped the front of the model in some egg yolk. Next he climbed the stairs to the upper balcony and gave the model a gentle push. It made several circuits over our heads, and it impressed the heck out of some prospective students and their parents sitting at a separate table. One of the parents said he didn't know that SUNY Geneseo had an aeronautics major.

These are just a few of the times George pulled the Rabbit out of the hat, demonstrating his superior airmanship. However, there was more to his ability to get models to fly, and he certainly borrowed heavily from other's experience in terms of the use of figure 8 hooks and braided motors that worked great on my Laird Super Solution. I've since used that system on nearly all my models with great success. But the one innovation that George made that is likely to be most lasting is his invention of the Nason Clutch (NC). It has changed the way freewheels work on rubber powered models. Before the advent of the NC, one had the choice of the ramp or metal clip type free wheeler. In theory, there is nothing wrong with either system and they work fine. However, once they disengage, they hardly ever re-engage. Most of us have experienced having a free wheeler disengage, for some unknown reason, while the motor is still half wound, only to hear the motor rapidly spill its winds, as we watch the model glide to a premature landing. This is such a rare occurrence with the NC, that under most conditions it immediately re-engages the unwinding motor. George teased us for several months at our monthly meetings. He demonstrated how his mechanism could easily disengage the free wheel, but could easily engage the prop if the motor was still unwinding. We were puzzled over how this was accomplished because he had the NC covered with a spinner. When he finally exposed the NC, we were greeted by a very simple and well thought out mechanism that is unlikely to fail unless broken or severely abused.

George also spent considerable time with me discussing the difference in flying indoors and outdoors. He noted that a rapid climb to altitude with a model that can then roll into cruise mode is an advantage outdoors. It usually involves trimming the model to turn right against the torque of the rubber motor. However, this is not always true indoors, especially with heavier scale models flown under low ceilings. He noted that when duration is considered, rapid gain in altitude indoors does not always result in increased duration. In fact, rapid climb indoors usually leads to an unfortunate flight into the solid overcast. This is not usually a problem with Penny Planes and other very light endurance models that bounce off the ceiling and keep flying. However, it can spell disaster for heavier scale models that are likely to stall and meet an unfortunate end hitting the gym floor. “This is where turning left has an advantage. Under high torque at the beginning of the flight, let the model roll with the torque and make a few circuits at low level. As the torque burns off the model will level its wings and start to climb,” said George. “Thus the early turning and burning adds to the duration without adding to the altitude, and the climb to altitude is slower toward the end of the motor run.”

George pointed out that this type of flight envelope is not easily achieved and requires careful small adjustments. “It's all about balance. For example, under the power burst the model has to have enough washout in the right wing, up elevator and side thrust to keep it from rolling too far to the left and crashing. At the same time, under reduced power, the model requires left rudder and less elevator to keep it from climbing too fast and wandering to the right where it will crash into the wall as the power winds down. Generally, each model has a number of quirks and characteristics that require individual attention. For example, a P51 with its long nose may require less side or down thrust than a shorter nosed Hawker Hurricane. Likewise, high wing models tend to be more docile than their low wing cousins, who, as a group, tend to be more temperamental,” said George.

Many of these concepts have been around since the beginning of stick and tissue, but George is one of the few to distill them into one coherent package and share his experience with others.

I'll miss George and our long winded discussions we'd have at the field or in the shop. He would heft one of my creations and comment on its strengths and weaknesses, never being demeaning and always helpful. There will always be more than a little bit of George's advice built into my models.