

CHAMPIONS

What makes
a winner?

BY DAN HORTON



They've been flying to Oshkosh every summer since 1970, from every corner of the continent. Each spent years in preparation, daydreams of the Big Show filling their minds as they worked in solitude, alone in barns and shops and lofts. People call them airplane builders, homebuilders, and sometimes crazy. Most will sheepishly admit they are, just a little. If you're reading this you're probably one of them. It's OK.

Statistically speaking, the completion of an airworthy airplane admits its creator to a very exclusive fraternity. The FAA grants less than 1000 new Experimental/Amateur-Built certificates each year, roughly one for every *quarter million* U.S. adults.

However, there is a club even more exclusive. In its Milwaukee and Rockford days the Experimental Aircraft Association formally organized a judging committee and set standards for measuring the *quality* of aircraft construction. When the EAA moved to its new home, the stage was set. If you wanted to measure your skills against the best builders in the world, Oshkosh was the place to go.

The first Oshkosh major convention was in 1970. The top award was called "Grand Champion Homebuilt," and it went to Arden Hjelle for his Tailwind, an airplane already famous in the then-small EAA community. The tradition of a single "best homebuilt" award continued through 1983, first as "Grand Champion Homebuilt" and later as "Grand Champion Custom Built". In 1984, recognizing the impact of a new wave of kit manufacturers, the homebuilt awards were split into Grand Champion Custom-Built (built from plans, and later called "Plans-Built") and Grand Champion Kit-Built. In the 43 years since that first Oshkosh, thousands of hopefuls have made the pilgrimage and presented their

best, but only about 75 aircraft have earned the Holy Grail of amateur aircraft construction for their builders.

A few weeks prior to the 2013 show, my esteemed editor-in-chief suggested I might like to interview a group of returning Grand Champions. What makes them tick? What drove them to build the best airplanes in the world? And given their obvious talents, what have they been doing since?

The Model Approach

If you want your child to grow up to be the greatest homebuilder ever, get the little snapper started by building model airplanes. Nine of our champions started with models, and I probably just neglected to ask the others.

Mark Gilmore started building around age seven, on a table in his bedroom, "as soon as my parents would let me play with an X-Acto knife." Randy Snarr started at eight with gas models, and says his Lancair is "just a big model airplane." Andy Werback's dad was an aero engineer, so his models had all the parts in the right places. Larry Kinder built airplanes and rockets. Too bad EAA doesn't (yet) have a "Grand Champion Rocket" category.

Models had their effect on adults too, in ways other than learning craftsmanship. Barry Bieber was a serious RC pattern contest flier when a few minutes at the controls of a full-size airplane convinced him the next step wasn't huge. Dave Nason built a 1/8th scale Spitfire, and liked wood aircraft construction so much he started a Falco.

Just Do It

The 20th century's classic training ground for practical mechanics has been the American farm. Not surprisingly, several of our Champions have rural backgrounds. Bernie Fried grew up in North Dakota, "always tinkering

Randy Snarr and his "big model airplane."





That's not Mark Gilmore's engine. That's a reflection of his engine in the polished firewall.

with something. My oldest brother flew a Cessna 150 over the farm when I was 10, and I was just crazy over that. Then about a year later he bought one, and I remember him parking it in the farmyard. He told me not to touch it, but I remember opening the door and turning on the nav lights, and it was just the coolest thing in the world."

Duane Hitchcock hails from the high plains of eastern Colorado. His family farmed in the summers and built custom ag machines in the winters, so Duane and his late brother, Royce, grew up with tools in their hands. The business grew along with the boys, and together they built Hitchcock Inc...and a lot of cars. By 1974 they had already collected NSRA "Grand Champion Street Rod" at the Street Rod Nationals (that year in St. Paul), the Oshkosh-equivalent of the custom car world.

If siblings share dreams, do twins share identical dreams? As teenagers, Dave Nason and his twin brother bought an old L-2 and started a restoration without knowing anything. Their father encouraged them (except when it got noisy late at night), and in time the boys learned enough to rebuild, re-cover, and convince an inspector to approve the work. They learned to fly in that L-2 and still own it today.

Apparently high-level auto work is excellent training for glue-and-glass guys. It's a reasonable connection; auto

body skills are all about creating the perfect, ripple-free surfaces so prized among composite aircraft builders. Glasair builder and master technician Barry Bieber has worked in the auto repair trade professionally all his life. Lancair builder Craig Schulz loves restorations; you could see the glow in his eyes when he talked about two past projects, a '66 Lincoln and a Jag E-Type. A Lancair was Duane Hitchcock's first airplane project, but after all those cars he was no stranger to the art of surface finishing.



Bernie Fried's T-18. Fit and finish separates champions from the rest.

Persistence

How long does it take to build a Grand Champion if you're *not* in a hurry? How long if you want everything *just so*, and don't care about time?

The answer, it seems, is twenty years.

Dennis Butler is the son of a carpenter and lobsterman who grew up to be an astrophysicist. He spent most of his career with a space shuttle contractor. Dennis originally wanted to build a Long-EZ, but Rutan quit selling plans before he pulled the trigger. Then he settled on a Cozy, but thought it needed to be a little bit larger. No problem for a rocket scientist; Dennis sat down and did all the calculations necessary to resize the components. He didn't care about the time investment. "I wasn't in any hurry. It was a hobby, and often the last thing on the list. There were times when I was pretty busy at work and didn't touch the project for a year, then I would go back and make up for it. I just wanted an airplane I liked, and it came out this way."

I asked Dennis if he knew anything about the judging standards when he was building the airplane. He said, "No, or it would have taken me 40 years."

Mark Gilmore is the quality control manager for a large automotive supplier,

one of those serendipitous cases where career and inclination are perfectly matched. Spend a few minutes examining the Gilmore Special and you get the feeling that imperfection bothers him, deep down.

This was Mark's first full size airplane. He had to teach himself all the skills of classic biplane construction (meaning every skill in the catalog) as he went along. I asked Mark to show me his favorite component. He told me it was the sectional windshields. They're wonderfully vintage in appearance, with one-piece aluminum frames. He made three, maybe four sets before he got a pair he thought was good enough. I think he enjoyed every minute, learning more with each pair, knowing in the end he would have the satisfaction of a perfect set.

Persistence has a close cousin called obsession. Many champions, like Randy Snarr, cheerfully admit to being "kind of obsessive," but most prefer to think of it as discipline. They carefully schedule their lives to make room for the project.

The Players

I should begin with an apology. There was no possible way I could interview every past Grand Champion builder on the Convention grounds. After all, even the late, great Jack Cox didn't interview more than a few each year, and, dear reader, I am no Jack Cox. In the interests of sanity (mine), interviews were limited to past Grand Champions who were present and still owned their award winner. To the others I can only say, "I'm sorry," and hope you'll accept a bottle of Spotted Cow in humble tribute at Oshkosh 2014.

In chronological order, our returning Champions included:

1981 Plans	Larry Kinder	Mustang II	N81LK
1997 Kit	Barry Bieber	Glasair IIS RG	N3202S
1998 Kit	Duane Hitchcock	Lancair 320	N222H
2002 Plans	Bernie Fried	Thorp T-18C	N18XS
2006 Plans	Dave Nason	Falco F.8L	N227DT
2008 Kit	Craig Schulz	Lancair 320	N73S
2009 Plans	Mark Gilmore	Marquart Charger	N279Y
2009 Kit	Randy Snarr	Lancair 235/320	N694RS
2011 Plans	Bill & Charlie Nutt	Falco F.8L	N767CN
2011 Kit	David Buntin	Vans RV-8	N130YS
2012 Plans	Dennis Butler	Cozy III	N861DB
2012 Kit	Andy Werback	Lancair Legacy	N550AW

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They need the little fix of shop time that both satisfies an itch and brings them closer to completion.

Craig Schulz built his Lancair on a simple routine; get the kids home from school, hit the shop until 2 a.m., and finish in 20 months. Dave Buntin simply treated it as his other job; one day

a pilot, the next day a builder, always a man on a mission. Larry Kinder built his Mustang in a loft under the same roof where he worked days as a machinist. It took him 4½ years at 20 hours a week, fabricating everything from scratch and, 30 years later, he still feels guilty because he didn't shoot his own

paint. For Barry Bieber it was Monday through Wednesday in the shop after supper, working until 11 p.m. Thursday he worked late at the dealership. Friday was date night, devoted to his wife. The weekends were his, 12 to 14 hours a day. His 1990s pre-quickbuild Glasair IIS took him 6½ years.

Risk of Flight

It's tempting to think these aircraft are hangar queens, swaddled in cotton and hermetically sealed in plastic bags between Oshkosh appearances. I didn't get exact numbers for everyone, but the truth is, most are flying more than average. Bieber, Hitchcock, Kinder, and Nason have all flown their older airframes over 1000 hours.

In this group Mark Gilmore's Special edges closest to being coddled, but nobody makes fun. The Special is unashamedly an art piece, polished and pampered. It's not flown a lot, but when Mark does fly it, even bugs detour around out of sheer respect. Custom biplanes have different rules.

Larry Kinder literally flew the spinner off his Mustang II racing in this year's AirVenture Cup. He was about 10 miles from the finish line when he felt a vibration, and boom, it was gone. Good thing there was some space between the airplanes. It would have been a shame to hit fellow Lindy winner Craig Schulz, also a race entrant, with an errant spinner.



That's not going to polish out. Photo courtesy of Duane Hitchcock.



"Spinnerless" Larry Kinder.

Bad things can happen to prize aircraft, even at the Big Show. In 2008 Randy Snarr was directed into a ditch at Oshkosh and took 6 inches off his prop. While taking shelter in Homebuilt HQ during a thunderstorm, Dave Nason watched the wind blow the top off a vendor's smoothie bar, spin it around three times, and drive it through the side of his Falco.

Perhaps nothing can top "The Case of the Missing Hangars." One evening in June of 2011, a huge thunderstorm on the Colorado plains generated what the Goodland, KS NWS office called "a classic microburst event." The AWOS at Duane Hitchcock's home base, Kit Carson Field, recorded a gust at 84 mph, but no one will ever know the true velocity. What is known is that all sixteen T-hangars lifted off their foundations and flew away like Aunty Em's farmhouse; the only thing lacking was a witch on a bicycle. The *really* strange thing was that all the airplanes stayed in place, including Duane's N222H. Something hit the rudder hard enough to break it, and the lower cowl (which was on the floor, along with the canopy and other parts) wound up in a field about a quarter-mile away. The rest stayed put. Go figure.

—D.H.

Kit Carson Field. Nothing left but the doors. N222H is at center right. Photo courtesy of Duane Hitchcock.



Community

No less than nine out of 12 builders cited the overall quality level within their builder community as one factor driving their own efforts. It's particularly prevalent in the Lancair world. As Andy Werback said, "You have to keep up with the standard."


Falco builder Dave Nason came to Oshkosh every year to examine the other Falcos, and found himself saying, "If he can do that, I can do it." Every year he went home with new ideas and higher ideals. When he started bringing his completed Falco to the show, Bill and Charlie Nutt were there to examine it and take home lessons for their own project.

Dave Buntin volunteered to help other Van's RV builders around Louisville, and fell in with a group whose quality standards were higher than the norm. When it came time to build his own RV-8, quality wasn't an option. "I wanted to build as nice an airplane as I could, because I *had to* with those guys around."

If At First You Don't Succeed


Oshkosh judging is, in one detail, very simple; an aircraft can never again win the same or a lesser award. You are, however, welcome to make improvements and try to move up. The rule means some builders get only one bright flash of the spotlight; with a Gold Lindy in hand there is no place left to go. Although stellar, it is not unusual. In just this group Messrs. Bieber, Buntin, Gilmore, Hitchcock, and Kinder were all Grand Champions on their first appearance.

Everyone is asked if they want their airplane judged. A few of our Champions did it on a lark, not realizing where the path would lead. Just ask Bernie Fried or Randy Snarr. Bernie got a Bronze Lindy in 2000 and went home thinking about improvements. He came back prepared in 2001, received a Silver, and finally scored a Gold in 2002. He says the difference between Silver and Gold was not having his N-number on the panel and failing to label a few circuit breakers. Randy got interested after



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receiving a Workmanship Award in 2006, and improved his Lancair every year for the next three; Bronze in 2007, Silver in 2008, and Gold in 2009.

Sometimes the last-minute rush to make OSH means not quite everything is finished. When Dennis Butler arrived in 2011, the Cozy had no wheel-pants, control stick boots, or most of

the interior. The judges still found it worthy of a Silver Lindy, which should give you a clue about the airplane's fundamental build quality. Nobody was surprised (except maybe Dennis) when a Gold came in 2012.

Bill and Charlie Nutt went four years between a Silver and a Gold. Dave Nason went six. After completing the

most complex project in homebuilding, Falco guys obviously don't feel a need to hurry.

Aftermath

So what does a builder do after reaching the top?

You might be surprised to learn that for most of this group, there has been no follow-up project. Set aside the recognition, burrow down into the conversations, and you'll hear the same theme over and over. These guys built the airplane they wanted, to satisfy themselves. They already have the perfect airplane.

That's not to say there are no shop animals in this group. Craig Schulz loves his Lancair, but got an itch for something low, slow, and very retro. Think art deco with a radial. Given time I think we'll see him at the awards again. Andy Werback just might be the Energizer Bunny in disguise. The 2012 Kit Grand Champion built two Lancairs and a Skybolt biplane in nine years (the Skybolt flew in March 2013), and earned an A&P license at the same time by working as an apprentice. Andy's secret weapon is his wife, Sam. There's no telling what they might turn out next.

Mark Gilmore is now an Oshkosh judge, and cheerfully answers biplane builder questions from all quarters. Bill Nutt mostly flies the Falco home to Minnesota. He spends his spare time looking after his three daughters and teasing his wife, Rita, about a helicopter to fly from the back yard. And, of course, every year he and Charlie fly to Oshkosh.

Randy Snarr also has three kids (16, 15, and 10, girl, boy, girl), and they all love to fly. Maybe that's why he is rolling on about 100 hours per year. Dave Buntin has three boys, 23, 21, and 16. For now it is family first, and answering questions from the huge RV community.

Larry Kinder has tinkered with his Mustang II for 30 years, and likes to enter a Sport Air Racing League event from time to time. At the 2012 Northwoods event he posted the second fastest time overall, at 234.7 mph. Duane Hitchcock has, not surprisingly, returned to cars, the latest project being a '67 Corvette. The Lancair

Commitment

It's often said an airplane is a labor of love. If you have any doubts, you need to meet Bill and Charlie Nutt.

Charlie always wanted to be an airline mechanic. He entered Parks College in 1952, followed school with a stint in the jet test cells at Allison, and then worked for five different airlines, starting on DC-3s. He got interested in the Falco "back in my 50s, when I saw an ad for that airplane and it intrigued me. . . I sent away for the brochure, but then having six children and trying to get them all college educated, I had to put it on the back burner."

Bill was the oldest. Charlie's mindset meant Bill got the guidance he needed to become a pilot, then in turn a college graduate, an Air Force officer, and an airline pilot. He never forgot his dad's interest in the Falco, and when Charlie retired in the early 90's Bill asked him if he would still like to build one. Charlie said, "I told him I couldn't build it alone anymore, and he said, 'What if we tried to build it together?' I thought that would be nice. Our wives said we were out of our minds, but I said we would do it anyway."

Why did the ladies think it was a crazy idea? Bill's second career as an Air Force reservist meant he, his wife, and three daughters lived just south of Dover AFB, in Delaware. The Nutt family home is in Montgomery, Minnesota, 1000 miles away as the crow flies.

Father and son didn't blink. Bill's job as an airline pilot meant he could jumpseat into Minneapolis for a work session about once a month. When at home he built components: fuselage frames, landing gear assemblies, the instrument panel, anything that would Fed-Ex to his dad. Big parts slowly went together in Charlie's shop. It took them 12 years.

Bill made the first flight in early June of 2007. They wanted to make Oshkosh in late July, so he spent a lot of time in the jumpseat in order to work his regular airline trips and fly off 40 hours in Minnesota. They landed at Wittman Field without gear doors and with the Falco still smelling like wet paint. Late in the week they got an envelope asking them to attend the awards. Bill recalls, "When it got down to only two trophies left [and their names had not yet been called], we just looked at each other."

They got Reserve Grand Champion that year, a Silver Lindy. I wish I could have seen that look.

—D.H.

Bill and Charlie—combining talents for a Champion, and the ultimate father/son project.



is for visiting grandchildren, and the occasional business trip. It's a long way from Burlington, Colorado, to anywhere. Speed is good.

Dave Nason handcrafts custom homes, but clears his schedule for a month every summer to serve as an instructor at the EAA Air Academy, teaching woodworking to airplane-crazed teenagers. Watch Dave with the kids; they like him, and the feeling is mutual. It's clear that creating the next generation of homebuilders gives him immense satisfaction.

There You Have It

I could happily spend hours on a quiet front porch with any of these people. I don't think the conversation would slow when we ran out of airplane talk. They're uniformly nice folks, with jobs and families and lives like yours and mine.

They all worked hard, but most didn't expect much the first time they showed their creation. A few were hesitant, and still marvel at how things turned out. All recognize luck, the kind that caused



Dave Nason and some of his Air Academy kids.

them to be at Oshkosh for the one brief week in which they would be The Best Homebuilder On Planet Earth. As Dave Nason said, "It depends on who shows up." Think about it. What might the results have been if all had arrived in the same year?

The next time you go to the shop, remember that these gentlemen once

knew nothing and had no skills. They learned, and practiced, and made parts repeatedly until they were *satisfied*. That's the key. Forget the time and enjoy the work. In the end, personal satisfaction is the only lasting reward.

Still, being a Grand Champion is nice. You can do it, too. Just do the best you can. †

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